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Appendix B

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Annotated Bibliography

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1 **1 Introduction**

2 Appendix B provides an annotated bibliography of relevant documents used to develop the 100-BC-1,
3 100-BC-2, and 100-BC-5 Operable Units remedial investigation/ feasibility study.

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Table B1. 100-BC Annotated Bibliography

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
BHI-00917	Rev. 0	100-BC, 100-KR, 100-HR, 100-FR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4	1996	R.E. Peterson, R.F. Raidl, C.W. Denlow	Conceptual Site Models for Groundwater Contamination at 100-BC-5, 100-KR-4, 100-HR-3, and 100-FR-3 Operable Units	http://www5.hanford.gov/arpir/?content=indpage&AKey=D197142704	This document presents technical information on groundwater contamination in the 100-BC-5, 100-FR-3, 100-HR-3, and 100-KR-4 groundwater operable units on the Hanford Site. These operable units are defined for groundwater that underlies the retired plutonium production reactors and support facilities located along the Hanford Reach of the Columbia River. An additional 100 Area groundwater operable unit, 100-NR-2, is addressed by separate documentation. In this document, the most recent site information has been assembled into conceptual site models (CSM). The objective was to assemble and evaluate the best information available to support a better understanding of the nature, extent, and transport of contamination in each groundwater operable unit. These CSMs are recommended for use to assess and prioritize 100 Area groundwater remediation options	Z	Y	M	NO	NO	
BHI-01673	Rev. 0	100-BC	100-BC-1	25-Jun-05	BHI	100-BC AREA ECOLOGICAL RISK ASSESSMENT DATA QUALITY OBJECTIVES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D1080389	The purpose of this data quality objective (DQO) process is to define the scope and data needs to support a pilot baseline risk assessment of the remedial actions at the 100-B/C Area of the Hanford Site. The objective of the 100-B/C pilot study DQO summary report is to begin the process of evaluating the site conditions following remediation and to determine the environmental measurements necessary to assess protectiveness of the remedial actions. This DQO summary report will support the development of a sampling and analysis plan (SAP) to obtain additional data.	D	Y	Yes	NO		
BHI-01706	Draft A	100-BC	100-BC-1	1-Oct-03	BHI, K.A. Gano, P.G. Doctor	CONCEPTUAL SITE MODEL FOR 100-BC PILOT PROJECT ECOLOGICAL RISK ASSESSMENT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D3253629	This document details a CSM that illustrates the relationship between contaminant sources, transport mechanisms, and receptors. The purpose of the CSM is to organize existing site information and to identify additional information that must be obtained. The CSM described in this document has been developed to support a portion of the "problem formulation" step of the 100-B/C Pilot Project risk assessment. The introduction briefly discusses the background and purpose of the CSM. The site summary focuses on the activities that affected environmental conditions at the site, information regarding waste management practices, and the extent of site remediation. The environmental setting of the 100-B/C Area, including the identification of key study zones and resident species, is detailed in Section 3.0. The source characterization portion of the CSM describes the types and extent of post-remediation contaminant sources within the 100-B/C Area. The discussion of contaminant transport pathways describes the routes that contaminants take as they migrate from the source to environmental receptors and through the food chain. Key human and ecological receptors that could potentially be exposed to residual	D, H	Y	NO	NO		
BHI-01739	Rev. 0	100-BC	100-BC-1, 100-BC-2	1-Aug-04	BHI, CA Bentz	TEMPORARY SEWAGE HOLDING TANK ENGINEERING REPORT FOR 100-BC AREA REMAINING PIPELINES AND SEWERS PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D6098896	This report is submitted for approval of a temporary sewage holding tank, which will serve the 100-B/C Area Remaining Pipelines and Sewers (RPAS) Project. The site is located approximately 50 km (31 mi) northwest of Richland, Washington, within Benton County. Project support facilities are required for the RPAS Project. These facilities will provide office and workspace for the supervisors, engineers, technicians, and craft workers engaged in field work. The facilities will be temporary, modular buildings sized to accommodate the anticipated staff for approximately 2 years. Temporary utilities will be required to support the facilities. A mobile restroom trailer discharging to a below-grade temporary sewage holding tank will be used by the site workers. Wastewater production from the mobile restroom trailer is anticipated to occur 8 hours per day, 5 days per week.	C, G	S	NO	NO		
D&D-24693	Rev. 1	100-BC	100-BC	2007	FH, DOE/RL, J. SEAVER, B. CHARBONEAU	Sampling and Analysis Instruction for BC Controlled Area Soil Characterization	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA06717478	This sampling and analysis instruction (SAI) defines the sampling and analysis activities to be performed to characterize the soils in the BC Controlled Area for nonradioactive contaminants. These activities are in support of the remedial investigation/feasibility study (RI/FS) process for both the human-health and the environmental risk assessments. Because this work is linked to DOE/RL-2006-50, 200-UR-1 Unplanned Release Waste Group Operable Unit Sampling and Analysis Plan, the QAPjP in that document will provide quality assurance protocols for areas and items not specifically covered by this SAI. This section provides background information about the project, a list of the COPCs, and a definition of the problem addressed herein.	D	Y, S	NO	NO		
DOE/RL-2000-59	Rev. 0	100-BC, 100-FR, 100- HR, 100-IU	100-BC-5, 100-FR-3, 100-HR-3, 100-IU-2, 100-IU-6,	2000	DOE/RL	SAMPLING AND ANALYSIS PLAN FOR AQUIFER SAMPLING TUBES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8510131	This sampling and analysis plan (SAP) presents the overall rationale and strategy for the sampling and analyses proposed for samples collected from aquifer sampling tubes adjacent to and within the Columbia River. Fiscal year (FY)-specific sampling locations and analyses for aquifer sampling tubes are finalized and are documented in a FY groundwater aquifer tubes sampling and analysis instruction (SAI). The SAI is prepared in accordance with BHI-EE-01, Environmental Investigation Procedures, procedure 1.15, "Sampling Documents," and provides FY-specific sampling that implements the requirements of this SAP. Groundwater contamination is known or suspected along the Hanford Site shoreline of the Columbia River, adjacent to the retired reactor areas. Aquifer sampling tubes were installed along the 100 Area and Hanford town site shorelines in an effort to monitor the extent and concentration of contaminated groundwater discharging into the river.	D, H	Y	A	NO	NO	
DOE/RL-2001-09	Rev. 0	100-BC	100-BC-1	2001	DOE/RL	ENGINEERING EVALUATION COST ANALYSIS FOR 105-B REACTOR B-REACTOR FACILITY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8758524	This document presents the results of an engineering evaluation/cost analysis (EE/CA) that was conducted to evaluate alternatives to address an interim removal action at the 105-B Reactor Facility (subsequently referred to as the 105-B Facility 2). The purpose of the EE/CA is to evaluate and identify recommended non-time-critical removal action from a viable set of alternatives. The EE/CA describes the 105-B Facility, its historical significance, and interim action alternatives for cleanup and historic preservation. Additionally, site conditions and the sources and extent of contamination are presented to provide a framework for the discussion of removal action objectives and alternatives. Finally, each alternative is compared against a set of CERCLA criteria, and a recommended alternative is presented.	D, H	Y, S	A	NO	Yes	

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-2001-35	Rev. 0	100-BC, 100-DR, 100-HR	100-BC-1 100-DR-1 100-HR-1	2001	DOE/RL	100 AREA BURIAL GROUNDS REMEDIATION ACTION SAMPLING AND ANALYSIS PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8949758	This sampling and analysis plan (SAP) presents the rationale and strategy for the sampling and analysis activities developed in support of remediation of the 100 Area burial grounds. The purpose of the proposed sampling and analysis activities is the characterization of contaminated soil and debris for waste designation, and post-remediation characterization of the residual soils in pits and trenches for site closeout. Waste designation is presented for information purposes only and the generator is responsible for proper waste designation. This SAP is based on the data quality objectives developed for the 100 Area burial grounds (BHI 2001).	D, H		Y	M	NO	NO
DOE/RL-2001-68	Draft A	100-BC	100-BC-1	2002	DOE/RL	REMOVAL ACTION WORK PLAN AND SURVEILLANCE AND MAINTENANCE PLAN FOR 105-B REACTOR B- REACTOR FACILITY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D9003789	This document provides an opportunity to combine the B Reactor removal action work plan and the surveillance and maintenance (S&M) plan for an interim 10-year period of time. These documents have many similarities and, by combining them, text can be streamlined and efficiencies gained. The purpose of this removal action work plan is to establish the methods and activities required to perform the following functions: provide upgrades to facility infrastructures to ensure that risks to the public and workers from remaining hazardous substances are minimized. Remove, decontaminate, contain, or encapsulate hazardous substances in publicly accessible areas of the 105-B Reactor Facility.	D, H			A	NO	NO
DOE/RL-2002-43	Draft B	100-BC	100-BC-1	2003	DOE/RL	EVALUATION OF FINAL CONFIGURATION ALTERNATIVES FOR 105-B REACTOR FACILITY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D1080319	This document presents the results of an evaluation of three final configuration options for the 105-B Reactor Facility pending eventual removal and disposal of the reactor core within the next 66 years. This document describes the 105-B Facility, its historical significance, and interim action alternatives already selected for historic preservation. The document also describes site conditions and the sources and extent of contamination to provide a framework for the discussion of cleanup action objectives and alternatives. Actions evaluated in this document would not be implemented for at least 3 years, pending evaluation of additional alternatives and selection of a final removal action. Each alternative is compared against the criteria of effectiveness, implementability, and cost. The alternatives identified and evaluated in this document may be identified as removal action alternatives in a future CERCLA evaluation.	D, H		Y, S		Yes	Yes
DOE/RL-2003-08	Draft A	100-BC	100-BC-1	2003	DOE/RL	100-BC AREA ECOLOGICAL RISK ASSESSMENT SAMPLING AND ANALYSIS PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D1596024	This sampling and analysis plan (SAP) presents the rationale and strategy for the sampling and analysis activities of the 100-B/C Pilot Project. The purpose of the pilot study is to begin the process of evaluating the effectiveness of the remedial action projects in the 100-B/C Area of the Hanford Site for protecting human health and the environment. A portion of the 100-B/C Area upland, riparian, and near shore river soil, water and biota will be sampled to evaluate protectiveness of human health and ecological receptors in this area. Contaminant concentrations in soil and biota will be compared to endpoint criteria specified by Washington State regulations, U.S. Department of Energy technical guidance, or as supported by the scientific literature.	D, H	G	Y		NO	NO
DOE/RL-2003-38	Rev. 0	100-BC	100-BC-5	1-Sep-04	DOE/RL	100-BC-5 OU SAMPLING AND ANALYSIS PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D3429520	The objective of this sampling and analysis plan is to continue long-term groundwater monitoring as well as extend the study of the effect that contamination at the 100-B/C Area has had on the near-shore environment of the Columbia River. This plan also provides guidance for measuring the decay or decline in concentration of contamination already in groundwater. No groundwater remediation of the 100-BC-5 Operable Unit has been planned, and no date has been set for publication of the record of decision on final remedial measures for the unit. The activities described in this plan were the outcome of a data quality objectives process that identified two needs: (1) to revise the boundaries of the 100-BC-5 Operable Unit to include an area that was geographically connected to the current operable unit boundaries that might contain information useful in assessing the migration of groundwater contamination and (2) to enhance the shoreline monitoring to determine the impact of residual contaminants coming from the 100-BC-5 Operable Unit. The revised monitoring network is made up of wells, shoreline seeps, and aquifer sampling tubes either already in the ground near the 100-B/C Area or being planned for installation.	D, H		Y		NO	NO
DOE/RL-2004-55	Draft A	100-BC	100-BC-1	2004	DOE/RL	ENGINEERING EVALUATION COST ANALYSIS FOR FINAL CONFIGURATION OF 105-B REACTOR FACILITY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5805805	This document presents the results of an evaluation of three removal action alternatives for the final configuration of the 105-B Reactor Building pending eventual disposition of the reactor core by 2068. This document briefly describes the 105-B Reactor Building, its historical significance, and interim action alternatives already selected for historic preservation. The document also describes site conditions and the sources and extent of contamination to provide a framework for the discussion of removal action objectives and alternatives. Finally, each alternative is compared against the criteria of effectiveness, implementability, and cost.	D, H		Y, S	A	Yes	Yes
DOE/RL-2004-66	Draft A	100-BC	200-LW-1	2005	DOE/RL	Focused Feasibility Study for the BC Cribs and Trenches Area Waste Sites	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA170624	The purpose of this FFS is to develop and evaluate alternatives for remediation of the 28 waste sites in the BC Cribs and Trenches Area and to function as a supporting document to the pp. This FFS will refine preliminary potential applicable or relevant and appropriate requirements (ARAR)(Appendix B), remedial action objectives (RAO), and general response actions initially identified in DOE/RL-98-28, 200 Areas Remedial Investigation/feasibility Study Implementation Plan - Environmental Restoration Program (Implementation Plan). The initial remedial alternative development activity provided the basis for developing a focused range of viable alternatives for the BC Cribs and Trenches Area waste sites. The alternatives considered within this FFS include a range of response actions that are appropriate to address site-specific conditions.	D, H, P	G, E, T	Y	A	Yes	Yes

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-2005-40	Draft B	100-BC	100-BC-1	2006	DOE/RL	100-BC PILOT PROJECT RISK ASSESSMENT REPORT	http://www5.hanford.gov/arpir/?content=findpage&AKey=DA01944866	The purpose of the 100-B/C Pilot Project Risk Assessment was to develop a process to evaluate the protectiveness of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial actions performed for the 100-B/C Area operable units with the intent that lessons learned would be applied to subsequent risk assessments performed within the River Corridor. This risk assessment characterizes the potential risks to human health and the environment under the cleanup standards implemented in remedial actions performed to date. The scope of the 100-B/C Pilot Project Risk Assessment includes all remediated liquid and-solid waste sites in the upland 100-B/C Area, as well as the riparian shoreline and near-shore Columbia River adjoining the 100-B/C Reactor operations area.	H	G, E, C, T	S, Y	A, M	Yes	NO
DOE/RL-2007-14	Rev. 1	100-BC	100-BC-1	2007	DOE/RL	Sampling and Analysis Plan for Phase 1 of the BC Cribs and Trenches Area Waste Sites Excavation-Based Treatability Test	http://www5.hanford.gov/arpir/?content=findpage&AKey=0804280121	This sampling and analysis plan defines the data-collection requirements for Phase 1 of a treatability test designed to support remedy selection at the BC Cribs and Trenches Area waste sites. The treatability test will assess field conditions related to removal, treatment, and disposal of near-surface contamination present in representative waste sites (as many as two trenches and one crib) within the BC Cribs and Trenches Area waste sites. The specific objective of the treatability test is to provide data that will support evaluation of the partial removal, treatment, and disposal alternative.	D, H		Y		NO	NO
DOE/RL-2007-15	Rev. 0	100-BC	100-BC-1	2008	DOE/RL	Excavation-Based Treatability Test Plan for the BC Cribs and Trenches Area Waste Sites	http://www5.hanford.gov/arpir/?content=findpage&AKey=DA06940526	This treatability test plan has been prepared to describe the activities to be undertaken to support remedy selection at the BC Cribs and Trenches Area Waste sites. The Treatability test will assess field conditions related to removal, treatment, and disposal of near-surface contamination present in representative waste sites within the BC Cribs and Trenches Area waste sites. After initial characterization of the selected trenches and crib, the remedial-action alternative of partial removal, treatment, and disposal of near-surface contamination will be tested. This treatability test will correlate the predicted radiation dose based on preexcavation characterization data with actual dose received during excavation activities.	D			A	NO	NO
DOE/RL-2007-51	Rev. 0	100-BC	200-UR-1	2008	DOE/RL	Engineering Evaluation/Cost Analysis for the Northern Part of the BC Controlled Area (UPR-200-E-83)	http://www5.hanford.gov/arpir/?content=findpage&AKey=00099817	This document presents the results of a non-time removal action engineering evaluation/cost analysis (EE/CA) addressing disposition of contaminated soil from the northern part of the BC controlled Area. This EE/CA was prepared in accordance with the comprehensive Environmental response, compensation, and liability Act of 1980 (CERCLA). The purpose of this EE/CA is to evaluate removal action alternatives to mitigate threats to human health and the environment posed by contaminated soil in the northern part of the BC Controlled Area in Zones A and B. This contaminated soil has recently been determined through analytical sampling to pose an unacceptable risk to ecological receptors, containing levels of cesium-137 and strontium-90, which range between approximately 0.32 to 3420 pCi/g.	D, H		Y, S		NO	Yes
DOE/RL-2009-44	Rev. 0	100-BC	100-BC-1, 100-BC-2, 100-BC-5	2010	DOE/RL	SAMPLING AND ANALYSIS PLAN FOR THE 100-BC-1 100-BC-2 AND 100-BC-5 OPERABLE UNITS REMEDIAL INVESTIGATION FEASIBILITY STUDY	http://www5.hanford.gov/arpir/?content=findpage&AKey=1004211024	This sampling and analysis plan (SAP) supports the remedial investigation (RI)/feasibility study (FS) process for 100-B/C. The 100-BC Area is located on the Hanford Site in southeastern Washington and is associated with two source operable units (OUS), 100-B3C-1 OU and 100-BC-2 OU. The 100-BC-5 Groundwater OU underlies the two-source operable units. This SAP describes the sampling and analysis to be performed associated with environmental investigation borings (boreholes), test pits, and groundwater monitoring wells. Figure II-I shows the location of the planned and existing boreholes, test pits, and groundwater monitoring wells within the scope of this SAP. Table II-I presents the intersection of data gaps discussed in the addendum and sampling and analysis activities.	H		Y		NO	NO
DOE/RL-90-07	Rev. 0	100-BC	100-BC-1	1992	DOE/RL	REMEDIAL INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR 100-BC-1 OU	http://www5.hanford.gov/arpir/?content=findpage&AKey=D196104396	This work plan and the attached supporting project plans establish the operable unit setting and the objectives, procedures, tasks, and schedule for conducting the CERCLA remedial investigation/feasibility study (RI/FS) for the 100-BC-1 operable unit. The 100-BC-1 source operable unit is one of four source operable units in the 100-B/C Area of the Hanford Site (Figure 1-2). Source operable units include facilities and unplanned release sites that are potential sources of hazardous substance contamination. The groundwater affected or potentially affected by the entire 100-B/C Area is considered separately as the 100-BC-5 groundwater operable unit.	D, H, P	G, Z, T			NO	NO
DOE/RL-90-08	Rev. 0	100-BC	100-BC-5	1992	DOE/RL	Remedial Investigation/Feasibility Study Work Plan for the 100-BC-5 Operable Unit, Hanford Site	http://www5.hanford.gov/arpir/?content=findpage&AKey=D196104316	Four areas of the Hanford Site (the 100, 200, 300, and 1100 Areas) have been included on the US Environmental Protection Agency's (EPA's) National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The Tri-Party Agreement requires that the cleanup programs at the Hanford Site integrate the requirements of CERCLA, RCRA, and Washington State's dangerous waste (the state's RCRA-equivalent) program. This work plan and the attached supporting project plans establish the operable unit setting and the objectives, procedures, tasks, and schedule for conducting the CERCLA remedial investigation/feasibility study (RI/FS) for the 100-BC-5 operable unit. The 100-B/C Area consists of the 100-BC-5 groundwater operable unit and four source operable units. The 100-BC-5 operable unit includes all contamination found in the aquifer soils and water beneath the 100-B/C Area. Source operable units include facilities and unplanned release sites that are potential sources of contamination.	D, H,	G, Z, T	S		NO	NO
DOE/RL-91-07	Rev. 0-A	100-BC	100-BC-2	1993	DOE/RL	Remedial Investigation/Feasibility Study Work Plan for the 100-BC-2 Operable Unit, Hanford Site	http://www5.hanford.gov/arpir/?content=findpage&AKey=D196093536	This work plan and attached supporting project plans establish the operable unit setting and the objectives, procedures, tasks, and schedule for conducting the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial investigation/feasibility study (RI/FS) for the 100-BC-2 operable unit in the 100 Area of the Hanford Site. The 100 Area is one of four areas at the Hanford Site that are on the U.S. Environmental Protection Agency's (EPA) National Priority List under CERCLA.	D, H, P	G	Y, S		NO	Yes

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-92-11	Rev. 0	100-BC	100-BC-1	1994	DOE/RL	100 AREA FEASIBILITY STUDY PHASE I AND II	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196089652	This 100 Area Phase I/II FS is built around existing data. In a typical Remedial Investigation/Feasibility Study (RI/FS), the Phase I/II FS is not completed until the RI Phase I is complete, although the Phase I/II FS is often started while the Phase I RI is being conducted. However, for the 100 Area, the size of the existing site characterization database is larger than the end result of many RIs and is adequate for identifying and screening remedial alternatives. Use of existing data to initiate and expedite the FS process is consistent with the past practice strategy. New site characterization data, while important for later detailed analysis, would not likely affect the outcome of the alternatives development and screening phases. The 100 Area Phase I/II FS evaluates the known characteristics of the Hanford 100 Area and identifies the range of remedial alternatives that are most appropriate for protection of human health and the environment for the entire aggregate area.	D	G	Y		NO	NO
DOE/RL-92-51	Rev. 0	100-BC	100-BC-1	1993	DOE/RL	100 AREA SOIL WASHING TREATABILITY TEST PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196128318	This test plan describes specifications, responsibilities, and general methodology for conducting a soil washing treatability study as applied to source unit contamination in the 100 Area. The objective of this treatability study is to evaluate the use of physical separation systems and chemical extraction methods as a means of separating chemically and radioactively contaminated soil fractions from uncontaminated soil fractions. The purpose of separating these fractions is to minimize the volume of soil requiring permanent disposal. It is anticipated that this treatability study will be performed in two phases of testing, a remedy screening phase and a remedy selection phase. The remedy screening phase consists of laboratory- and bench-scale studies performed by Battelle Pacific Northwest laboratories (PNL) under a work order issued by Westinghouse Hanford Company (Westinghouse Hanford). This phase will be used to provide qualitative evaluation of the potential effectiveness of the soil washing technology. The remedy selection phase consists of pilot scale testing performed under a separate service contract to be			Y		NO	NO
DOE/RL-93-06	Rev. 0	100-BC	100-BC-1	1994	DOE/RL	LIMITED FIELD INVESTIGATION REPORT FOR 100-BC-1 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196084645	This limited field investigation (LFI) report summarizes the data collection and analysis activities conducted during the 100-BC-1 Source Operable Unit LFI and the associated qualitative risk assessment (QRA), and makes recommendations on the continued candidacy of high-priority sites for interim remedial measures (IRM). The results and recommendations presented in this report are generally independent of future land use scenarios. This report is unique in that it is based on Hanford-specific agreements discussed in the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) (Ecology et al. 1990), the Hanford Site Baseline Risk Assessment Methodology (HSBRAM) (DOE-RL 1993a), the Remedial Investigation/Feasibility Study Work Plan for the 10aBC-1 Operable Unit (DOE-RL 1992a), and the Hanford Past-Practice Strategy (HPPS) (DOE-RL-1991), and must be viewed in this context.	D, H	G, E	Y	A, M	Yes	NO
DOE/RL-93-107	Draft A	100-BC	100-BC-1	1994	DOE/RL	100 AREA SOIL WASHING BENCH SCALE TESTS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196101077	The objective of this study was to evaluate the use of physical separation systems and chemical extraction methods as a means of separating chemically and radioactivity-contaminated soil fractions from uncontaminated soil fractions. The feasibility study was conducted on soil samples from two trenches, 116-C-1 and 116-D-1B. Two samples of soil were obtained from trench 116-C-1: one from the middle of the trench (Batch I) and one near the inlet (Batch II). A single sample (Batch III) was obtained from trench 116-D-1B.	D		Y		NO	NO
DOE/RL-93-37	Rev. 0	100-BC	100-BC-5	1994	DOE/RL	LIMITED FIELD INVESTIGATION REPORT FOR 100-BC-5 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196075584	This limited field investigation (LFI) was conducted to assess the applicability of interim remedial measures (IRM) for reducing human health and environmental risks within the 100-BC-5 Groundwater Operable Unit. The 100-BC-5 Operable Unit is one of three operable units associated with the 100 B/C Area. Operable units 1 and 2 address contaminant sources while 100-BC-5 addresses contamination present in the underlying groundwater. The primary method of investigation used during this LFI was the installation of monitoring wells. Samples were collected from the groundwater and soils and submitted for laboratory analysis. Boreholes were surveyed for radiological contamination using downhole geophysical techniques to further delineate the locations and levels of contaminants.	H	G, D, Z	Y		Yes	NO
DOE/RL-94-42	Rev. 0	100-BC	100-BC-2	1994	DOE/RL	LIMITED FIELD INVESTIGATION REPORT FOR 100-BC-2 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196054763	This report summary the data collection and analysis activities conducted during the 100-BC-2 Operable Unit limited field investigation (LFI) and presents the associated qualitative risk assessment (QRA). This report also provides recommendations on the continued candidacy for interim remedial measures (IRM) for the three high-priority waste sites and the 11 solid waste burial grounds in this operable unit. An IRM is intended to achieve remedies that are likely to lead to a final Record of Decision, and is not restricted to limited or short-term actions.	H	G, E		M	Yes	NO
DOE/RL-94-43	Rev. 0	100-BC	100-BC-1	1994	DOE/RL	118-B-1 EXCAVATION TREATABILITY TEST PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196055593	The Hanford 118-B-1 Burial Ground Treatability Study has been required by milestone change request M-15-93-04, dated September 30, 1993. The change request requires that a treatability test be conducted at the 100-B Area to obtain additional engineering information for remedial design of burial grounds receiving waste from 100 Area removal actions. This treatability study has two purposes: (1) to support development of the Proposed Plan (PP) and Record of Decision (ROD), which will identify the approach to be used for burial ground remediation, and (2) to provide specific engineering information for receiving waste generated from the 100 Area removal actions. Data generated from this test also will provide critical performance and cost information necessary for remedy evaluation in the detailed analysis of alternatives during preparation of the focused feasibility study (FSS). This treatability testing supports the following 100 Area alternatives: (1) excavation and disposal, and (2) excavation, sorting, (treatment), and disposal.	D, H			A	NO	NO

Document #	Rev./Draft/Vol.	Area	Operable Unit	Date	Authors/Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-94-59	Draft A	100-BC	100-BC-5	1994	DOE/RL	100-BC-5 OU FOCUSED FEASIBILITY STUDY REPORT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196059345	This focused feasibility study (FFS) report presents the detailed analysis of alternatives for both interim remedial measures (IRM) and potential future actions for the 100-BC-5 Operable Unit. By agreement among the operable unit managers, the FFS was initiated in support of a final action. However, in the course of evaluating alternatives, it was recognized that the data were insufficient to support a final action. Consequently, the unit managers decided to complete the document as an interim FFS to document the modeling and evaluation efforts done to date. Based on current knowledge, the potential contaminant of interest in the operable unit for a final action would be strontium-90 which has a calculated incremental cancer risk (ICR) of 2E-06 based on an occasional-use exposure scenario and which exceeds the Safe Drinking Water Act maximum contaminant level of 8 pCi/L in the near-river wells.	H	E	Y	A, M	Yes	Yes
DOE/RL-94-61	Rev. 0, Vol. 2	100-BC	100-BC-1, 100-BC-2, 100-BC-5, 100-DR-1, 100-DR-2,	1995	DOE/RL	100 AREA SOURCE OU FOCUSED FEASIBILITY STUDY [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196006751	This 100-KR-1 Operable Unit Focused Feasibility Study (FFS) is prepared in support of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial investigation/feasibility study (RI/FS) process for the 100 Areas. As discussed in Section 1.0 of the Process Document (defined as Sections 1.0 through 6.0 and Appendices A, B, and C of the 100 Area Source Operable Unit Focused Feasibility Study), the approach for the RI/FS activities for the 100 Areas has been defined in the Hanford Post-Practice Strategy (HPPS) (DOE-RL 1991). The HPPS emphasizes timely integration of ongoing site characterization activities into the decision making process (the observational approach) and expedites the remedial action process by emphasizing the use of interim actions.	D, H	E	Y	A	NO	Yes
DOE/RL-94-62	Draft A	100-BC	100-BC-1	1994 NOV	DOE/RL	100-BC-1 OU FOCUSED FEASIBILITY STUDY REPORT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196057347	This focused feasibility study constitutes the Phase 3 portion of the feasibility study process for the remedial alternatives initially developed and screened in the 100 Area Feasibility Studies I and 2 (DOE-RL 1993a). The focused feasibility study process is conducted in two stages, a Process Document (DOE-RL 1994a) and an operable unit-specific focused feasibility study document, such as this one. The focused feasibility study process is performed by implementing a "plum" style approach, as defined in greater detail in the Process Document, which is a companion to this document. The objective of this focused feasibility study is to provide decision makers with sufficient information to allow appropriate and timely selection of interim remedial measures for candidate waste sites associated with the 100-BC-1 Operable Unit.	D, H		Y	A	NO	Yes
DOE/RL-95-51	Rev. 0	100-BC	100-BC-1	1995	DOE/RL	100-BC-1 DEMONSTRATION PROJECT ERA PROPOSAL	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196020874	The objectives of this removal action are to provide information critical to the overall cleanup of the 100 Area and to provide measurable cleanup at the Hanford Site. The three waste sites proposed for removal in this expedited response action (ERA) proposal are the 116-B-4 French drain, 116-B-5 crib and the 116-C-1 process effluent trench. These sites have contaminants in soils largely at or near the surface that may pose a risk to human health and the environment either by direct contact or by migrating to groundwater and/or the Columbia River. The proposed ERA is excavation of these waste sites to a cleanup standard that will not preclude any future uses of the land due to contaminants resulting from Hanford operations.	D, H		Y	A	NO	Yes
DOE/RL-96-19		100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	1996 May 01	Weiss, S.G.	Mitigation action plan for liquid waste sites in the 100-BC-1, 100-DR-1, and 100-HR-1 units	http://www.osti.gov/bridge/product_biblio.jsp?query_id=4&page=0&osti_id=272505	A Record of Decision (ROD) was issued for remediation of waste site in the 100-BC-1, 100-DR-1, and 100-HR-1 Operable Units in the 100 Area of the Hanford Site. This Mitigation Action Plan (MAP) explains how mitigation measures for these remedial activities will be planned and implemented. The new activities planned in the ROD are not anticipated to result in releases of hazardous substances and will minimize disturbance of currently undisturbed areas. However, certain actions required by the ROD may result in the redistribution of areas of recovering vegetation. This MAP presents a strategy for limiting disturbances and identifies an opportunity for revegetating a previously disturbed site; the knowledge gained from this demonstration project can be applied to final revegetation of the rest of the remediated sites and sites disturbed during cleanup when remediation of an area is completed.	D, H				NO	NO
DOE/RL-96-22	Rev. 4	100-BC, 100-DR, 100-FR, 100-KR, 100-HR, 100-IU	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, 100-FR-1, 100-FR-2, 100-KR-1, 100-KR-2, 100-IU-1, 100-IU-2, 100-F-1	1-Sep-04	DOE/RL	100 AREA REMEDIAL ACTION SAMPLING AND ANALYSIS PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D6542136	This sampling and analysis plan (SAP) presents the rationale and strategies for the sampling, onsite measurements, and analyses that will be conducted on 100 Area waste sites excluding burial grounds, which are addressed in a separate plan. These waste sites are post-practice waste sites in the Environmental Restoration Contractor and River Corridor Closure Contractor scope for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, 100-FR-1, 100-FR-2, 100-KR-1, 100-KR-2, 100-IU-2, and 100-IU-6 Operable Units.	D, H		Y	A	NO	NO
DOE/RL-96-85	Rev. 0	100-BC, 100-F	100-BC-1	1996	DOE/RL	ENGINEERING EVALUATION COST ANALYSIS FOR 100-BC ANCILLARY FACILITIES 108-F BUILDING AND FINAL DISPOSITION OF WASTE GENERATED DURING 105-C REACTOR SAFE STORAGE ACTIVITIES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196245907	In 1995, the US Department of Energy (DOE), Richland Operations Office (RL) conducted a removal site evaluation of selected facilities in the 100 Area of the Hanford Site in accordance with CERCLA and 40 Code of Federal Regulations (CFR) 300.410. The scope of the evaluation included the aboveground portions of the 108-F Biology Laboratory in the 100-F Area and all inactive ancillary buildings and structures in the 100-B/C Area, excluding the reactor building and the river outfall. Based on the evaluation, RL determined that hazardous substances in the 108-F Biology Laboratory and five of the 100-B/C Area facilities may present a potential threat to human health or the environment, and that a non-time critical removal action at these facilities is warranted. This determination was documented in an engineering evaluation/cost analysis (EE/CA) approval memorandum.	D, H		Y, S	A	NO	Yes

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-97-37	Rev. 0	100-BC	100-BC-2	1998	DOE/RL	SAMPLING AND ANALYSIS PLAN FOR RELEASE OF 105-C BELOW GRADE STRUCTURES AND UNDERLYING SOILS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D198069363	This sampling and analysis plan (SAP) presents the rationale and strategies for the sampling, field measurements, and analyses of the below-grade concrete structures from the Hanford 105C Reactor Building and the underlying soils consistent with the land-use assumptions in the Record of Decision for the U.S. Department of Energy 100-BC-1, 100-DR-1, and 100-HR-1 Operable Units (ROD) (EPA 1995). This structure is one of nine surplus production reactors in the 100 Area of the Hanford Site. This SAP is based on the data quality objectives developed for the 105-C below-grade structures and underlying soils (BHI 1997).	D, H		Y	A, M	NO	NO
DOE/RL-98-18	Rev. 1	100-BC	100-BC-1	2000	DOE/RL	100 AREA BURIAL GROUND FOCUSED FEASIBILITY STUDY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8849007	This document provides the results of a focused feasibility study (FFS) that was conducted to evaluate alternatives for the remediation of 45 burial grounds located in the 100 Areas of the Hanford Site. The burial grounds were used for near-surface disposal of solid wastes containing radioactive and hazardous substances generated during operation of the Hanford Site's nine former plutonium-production reactors. Three remedial alternatives were developed and evaluated for their ability to mitigate the potential risks to human health and the environment that are presented by the 100 Area Burial Grounds. This FFS was conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).	D, H	G, E	Y, S	M	Yes	Yes
EPA/541/R-00/121		100-BC, 100-DR, 100-FR, 100- HR, 100-KR	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, 100-KR-2	2000	EPA	Declaration of the Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, and 100-KR-2 Operable Units, Hanford Site (100 Area Burial Grounds), Benton County, Washington	http://www.epa.gov/superfund/sites/rods/ulltext/r200010000310.pdf	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Burial Grounds), Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units.	D, H	G, Z, E	Y	M	NO	Yes
EPA/541/R-08/044		100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	1997	EPA	Amended Record of Decision for the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units Interim Remedial Actions, Hanford Site, Benton County, Washington	http://www.epa.gov/superfund/sites/rods/ulltext/a1097044.pdf	This Record of Decision (ROD) Amendment has been developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. Section 9601 et. seq., and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan, 40 Code of Federal Regulations Part 300. This ROD Amendment is based on the Administrative Record for the 100 Area. This decision document changes components of the selected interim remedial action for the Hanford 100 Area radioactive liquid effluent disposal sites and clarifies the role of revegetation of remediated sites with respect to the completion of the remedial actions.	H				NO	Yes
EPA/541/R-99/039		100-BC, 100-DR, 100-FR, 100- HR, 100-KR, 100-IU	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, 100-CW-3	1999	EPA	Superfund Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units	http://www.epa.gov/superfund/sites/rods/ulltext/r1099039.pdf	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Remaining Sites), 100 Area reactor waste, and portions of the 200 Area, Hanford Site, Benton County, Washington. Components of the selected remedy (known as Remove/Treat/Dispose) for the forty-six 100 Area sites include the following: Remove contaminated soils, structures, and associated debris; Treat these wastes as required to meet ERDF requirements; Dispose of contaminated materials at the Hanford Site's ERDF; and Backfill excavated areas with clean material and revegetate the areas.	D, H	G, Z, E	Y	M	NO	Yes
EPA/ROD/R10-00/ 121		100-BC, 100-DR, 100-FR, 100- HR, 100-KR	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, 100-KR-2	2000	EPA	Interim Remedial Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, and 100-KR-2 Operable Units, Hanford Site (100 Area Burial Grounds), Benton County, Washington	http://www.epa.gov/superfund/sites/rods/ulltext/r1000121.pdf	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Burial Grounds), Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units.	D, H	G, Z, E	Y	M	NO	Yes
EPA/ROD/R10-95/ 126		100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	1995	EPA	Interim Remedial Action Record of Decision for the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units, Hanford Site, Benton County, Washington	http://www.epa.gov/superfund/sites/rods/ulltext/r1095126.pdf	This decision document presents the selected interim remedial actions for portions of the USDOE Hanford 100 Area, Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Specifically the selected remedial actions will address 37 high priority waste sites that received liquid radioactive effluent discharges in the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units, as well as adjacent contaminated sites that are within the area required for remediation. This decision is based on the Administrative Record for this site and for the specific Operable Units.	D, H	G, Z, E	Y		NO	Yes

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
EPA/ROD/R10-99/ 039		100-BC, 100-DR, 100-FR, 100- HR, 100-KR, 100-IU, 200-CW	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 10-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, 200-CW-3	1999	EPA	Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units, Hanford Site, Benton County, Washington	http://www.epa.gov/superfund/sites/rods/glltext/r1099039.pdf	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Remaining Sites) 100 Area reactor waste and portions of the 200 Area, Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units.	D, H	G, Z, E	Y	M	NO	Yes
Not listed.		100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	28-Sep-95	EPA, DOE-RL, Ecology, C. Clarke, J.D. Wagoner, M.A. Wilson	DECLARATION OF RECORD OF DECISION FOR 100-BC-1 100-DR-1 AND 100-HR-1 OU USDOE HANFORD 100 AREA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D198066674	This decision document presents the selected interim remedial actions for portions of the USDOE Hanford 100 Area, Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Specifically the selected remedial actions will address 37 high priority waste sites that received liquid radioactive effluent discharges in the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units, as well as adjacent contaminated sites that are within the area required for remediation. This decision is based on the Administrative Record for this site and for the specific Operable Units.	D, H	G, Z, E	Y		Yes	Yes
Not listed.		100-BC, 100-DR, 100-FR, 100- HR, 100- KR, 100-IU	100-BC-1	15-Jul-99	EPA, DOE-RL, Ecology, C. Clarke, K. Klein, M. Wilson	INTERIM ACTION RECORD OF DECISION 100 AREA REMAINING SITES 100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-1 100-FR-2 100-HR-1 100-HR-2 100-KR-1 100-KR-2 100-IU-2 100-IU-6 AND 200-CW-3 OU HANFORD SITE BENTON COUNTY WASHINGTON	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199153689	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Remaining Sites) 100 Area reactor waste and portions of the 200 Area, Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units.	D, H	G, Z, E	Y		Yes	Yes
Not listed.		100-BC, 100-DR, 100-FR, 100- KR	100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-2	26-Sep-00	EPA, DOE-RL, Ecology, C.E. Findley, K. Klein, M.A. Wilson	DECLARATION OF RECORD OF DECISION FOR 100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-2 100-HR-2 100-KR-2 100 AREA BURIAL GROUNDS HANFORD SITE BENTON COUNTY WASHINGTON	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8453142	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Burial Grounds), Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units.	D, H	G, Z, E	Y		Yes	Yes
OSR-2007-0001	Rev. 0	100-BC	100-BC-1, 100-BC-2	2009	DOE/RL, WCH	100-BC Area Orphan Sites Evaluation Report	http://www.washingtonclosure.com/documents/mission_complete/100B-C-OSR-2007-0001_Rev0.pdf	This report summarizes the approach and results from an orphan sites evaluation of the Hanford Site 100-BC Area that was conducted between June and November 2004. The purpose of orphan sites evaluations is to increase confidence that waste disposal or releases requiring characterization and cleanup within a given land parcel of the Hanford Site river corridor have been identified. Information collected through conducting the evaluations also supports elements of the CERCLA 120 (h) (4) requirements for review and identification of uncontaminated property at federal facilities. The scope of an orphan sites evaluation includes conducting a historical review, a field investigation, briefings with DOE-RL and the lead regulatory agency, and issuance of a summary report. Characterization (sampling, exploratory excavation); waste excavation, removal, and disposal; and site closeout are excluded in the orphan sites evaluation scope of work.	H, P				NO	NO
PNNL-13326		100-BC	100-BC-5	2000	Pacific Northwest National Laboratory, M.D. Sweeney	Groundwater Sampling and Analysis Plan for the 100-BC-5 Operable Unit	http://www.pnnl.gov/main/publications/external/technical_reports/PNNL-13326.pdf	This plan includes the sampling, analysis, and quality assurance requirements for the 100-BC-5 Operable Unit on the USDOE Hanford Site.		Z			NO	NO
PNNL-14287		100-BC, 100-FR	100-BC-5, 100-FR-3	2003	Pacific Northwest National Laboratory, M.D. Sweeney, C.J. Chou	Data Quality Objectives Summary Report - Designing a Groundwater Monitoring and Assessment Network for the 100-BC-5 and 100- FR-3 Operable Units	http://www.pnnl.gov/main/publications/external/technical_reports/PNNL-14287.pdf	The 100-BC-5 and 100-FR-3 Operable Units are defined for groundwater beneath the 100-B/C and 100-F Areas, respectively. Each operable unit has undergone a limited field investigation and qualitative risk assessment as part of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial investigation process. Although decisions have been made to perform active remediation of contaminant sources, no decision has yet been made concerning remedial actions for groundwater at either operable unit. During this interim period, groundwater monitoring has been conducted in accordance with groundwater sampling and analysis plan for the 100-BC-5 Operable Unit.			Y	A, M	NO	NO
PNNL-17821		100-BC	100-BC	2009	PNNL, R.J. Serne, D.F. Rucker, A.L. Ward, D.C. Lanigan, W. Um, M.W. Benecke, B.N. Bjornstad	Electrical Resistivity Correlation to Vadose Zone Sediment and Pore-Water Composition for the BC Cribs and Trenches Area	http://www.pnnl.gov/main/publications/external/technical_reports/PNNL-17821.pdf	This technical report documents the results of geochemical and soil resistivity characterization of sediment obtained from four boreholes drilled in the BC Cribs and Trench areas. Vadose zone sediment samples were obtained at a frequency of about every 2.5 ft from approximately 5 ft bgs to borehole total depth. In total, 505 grab samples and 39 six-inch long cores were obtained for characterization. The pore-water chemical composition data, laboratory-scale soil resistivity and other ancillary physical and hydrologic measurements and analyses described in this report are designed to provide a crucial link between direct measurements on sediments and the surface-based electrical-resistivity information obtained via field surveys.		G			NO	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
SD-EN-RA-006	Rev. 0	100-BC	100-BC	30-Jun-94	Westinghouse Hanford Company	QUALITATIVE RISK ASSESSMENT FOR 100-BC-5 GROUNDWATER OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196075071	The QRA is an evaluation of risk using a limited amount of data and a predefined set of human and environmental exposure scenarios and is not intended to replace or be a substitute for a baseline risk assessment. The QRA evaluates the groundwater beneath the 100-B/C area as specified in the Remedial Investigation/Feasibility Study Work Plan for the 100-BC-5 Operable Unit (DOE-RL 1992b). The QRA also is streamlined to consider only two human health exposure scenarios (frequent-use) and (occasional-use) with two pathways (groundwater ingestion and inhalation of volatile organics from groundwater use), and a limited environmental evaluation based on agreements by the 100 Area Tri-Party unit managers (December 21, 1992 and February 8, 1993).	D, H	E			Yes	NO
SGW-39506	Rev. 1	100-BC	100-BC	20-Jan-10	CHPRC, M.W. Benecke	DATA QUALITY OBJECTIVES SUMMARY REPORT FOR THE BC CRIBS AND TRENCHES AREA CHARACTERIZATION OF THE SOIL DESICCATION PILOT TEST SITE	http://www5.hanford.gov/arpir/?content=indpage&AKey=1001280544	The purpose of this document is to define the data collection requirements for the characterization phase of the soil desiccation treatability test located in the BC Cribs and Trenches area. Data quality objective (DQO) Step 1 states the problem clearly and concisely and ensures that the focus of the study is unambiguous. The SDPT is planned/expected to be conducted in the BC Cribs and Trenches Area where the largest vadose zone inventory of Tc-99 contamination on the Hanford Site has been identified. Additionally, some characterization in the BC Cribs and Trenches Area already has been performed from boreholes for electrical resistivity correlation (ERC) validation.	H	Y	A, M	NO	NO	
WHC-EP-0216		100 AREA	100 AREA	1989	WHC	Preliminary OU Designation Project	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195060570	The Preliminary Operable Units Designation Project organizes the radioactive, hazardous chemical, and mixed waste management units and the resulting groundwater contamination plumes at the Hanford Site near the city of Richland, Washington, into groups that, due to complementary characteristics, would be amenable to combined characterization and/or remediation. These groups are referred to as operable units. Currently, 78 operable units have been designated and include the over 1,500 waste management units and four groundwater contamination plumes identified on the DOE-owned Hanford Site. The designation of operable units included all individual waste management units identified by the Hanford Waste Information Data System as of February 28, 1989 (9 refs, 9 tabs).	D			NO	NO	
WHC-EP-0601		100-BC, 100-H, 100- F, 100-N, 100-D	100-BC-1	1992 OCT	RM MITCHELL, SG WEISS WHC	1992 Synthesis of Ecological Data From 100 Areas	http://www5.hanford.gov/arpir/?content=indpage&AKey=D19613322	Complete plant and wildlife species lists for the Hanford Site have been compiled, and information on levels of contamination (as current as possible) in biota is presented. A list of major species has also been proposed. These are species that are structurally or functionally important in the ecosystem, are granted protective management status, provide an environmental service to humans, or serve as a possibly important pathway for contaminant movement. From this information, potential indicator species -- those that might be used to evaluate future prevailing environmental conditions at the Hanford Site -- have been suggested. Because of the vast quantity of information available regarding biota on the Hanford Site, and to make review of the two important ecosystems (Columbia River and terrestrial) easier, this document discusses each ecosystem independently.	D	C	Y		NO	NO
WHC-SD-EN-RA- 003	Rev. 0	100-BC	100-BC	1994	WHC	Qualitative Risk Assessment for the 100-BC-1 Source Operable Unit	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196076379	The QRA is an evaluation of risk for a predefined set of human and environmental exposure scenarios and is not intended to replace or be a substitute for a baseline risk assessment. It is streamlined to consider two human health exposure scenarios (frequent-use and occasional-use) with four pathways (soil ingestion, fugitive dust inhalation, inhalation of volatile organics from soil, and external radiation exposure) and limited ecological and groundwater evaluations. This is based on agreements by the 100 Area Tri-Party Unit managers. For humans, risk that might occur under frequent and occasional use were included to provide a range of risk estimates using reasonable maximum exposure (RME) parameters as provided in HSBRAM. The ecological evaluation concentrates on the potential effects of contaminants on Great Basin pocket mice.	h	E	Y	A	Yes	NO
WHC-SD-EN-TI- 011	Rev. 0	100-BC, 100-H, 100- F, 100-N, 100-D, 100- K	100-BC-1, 100-BC-2, 100-BC-3, 100-BC-4, 100-BC-5	1992	K.A. Lindsey	Geology of the Northern Part of the Hanford Site: An Outline of Data Sources and the Geologic Setting of the 100 Areas	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196090817	This report outlines the types of geologic data for the Hanford Site north of the Gable Mountain anticline and where this data can be obtained. Based on the available data, preliminary geologic interpretations will be presented. These interpretations will be divided into four site specific sections: (1) 100-BC and 100-K, (2) 100-N and 100-D, (2) 100-H, and (4) 100-F. This report includes a brief discussion of regional geology in order to put the study area in its geologic context.		G			NO	NO
DOE/RL-94-112	Draft A	100-BC	100-BC-5	1994	DOE/RL	PROPOSED PLAN FOR INTERIM REMEDIAL MEASURE AT 100-BC-5 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196033952	This Proposed Plan introduces the proposed decision for addressing Groundwater' during the interim period at the 100-BC-5 Operable Unit, located at the Hanford Site along the Columbia River. This document is made available for public review and comment by the U.S. Environmental Protection Agency (EPA) as lead agency, the Washington State Department of Ecology (Ecology) as a support agency, and the U.S. Department of Energy (DOE) as the responsible agency.	H	E			Yes	NO
DOE/RL-94-99	Rev. 0	100-BC	100-BC-1	1995	DOE/RL	PROPOSED PLAN FOR INTERIM REMEDIAL MEASURES AT 100-BC-1 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196015039	This Proposed Plan identifies the preferred alternative for interim remedial measures for remedial action of radioactive liquid waste disposal sites that include contaminated soils and structures at the 100-BC-1 Operable Unit, located at the Hanford Site (Figure 1). It also summarizes other remedial alternatives evaluated for interim remedial measures in this Operable Unit. The intent of interim remedial measures is to speed up actions to address contaminated areas that pose potential threats to human health and the environment.	H				Yes	Yes
DOE/RL-95-66	Draft A	100-BC	100-BC-2	1995	DOE/RL	PROPOSED PLAN FOR INTERIM REMEDIAL MEASURES AT 100-BC-2 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196007374	This Proposed Plan identifies the preferred alternative for interim remedial measures for remedial action of radioactive liquid waste disposal sites, and solid waste buried grounds that include contaminated soils, equipment, and structures at the 100-BC-2 Operable Unit, located at the Hanford Site (Figure 1). It also summarizes other remedial alternatives evaluated for interim remedial measures in this Operable Unit. The intent of interim remedial measures is to speed up actions to address contaminated areas that pose potential threats to human health and the environment.	H	E			Yes	Yes

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
DOE/RL-97-83	Rev. 0	100-B, 100-C, 100-K, 100-F, 100-IU, 100-D, 100-H, 200-CW	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1	1998	DOE/RL	PROPOSED PLAN FOR INTERIM REMEDIAL ACTIONS AT 100 AREA REMAINING SITES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D198209197	This Proposed Plan identifies the preferred alternative for interim remedial actions and corrective actions at waste sites and solid waste management units at the Hanford Site (Figure 1) as identified in Tables A-1 and A-2 of Appendix A. The waste sites subject to this Proposed Plan are referred to as the 100 Area Remaining Sites and consist of radioactively and chemically contaminated soils, structures, and associated debris located within 12 Operable Units in the 100 Area and 1 Operable Unit in the 200 Area of the Hanford Site. Contamination at the 100 Area Remaining Sites presents a risk to human health and the environment. Also included in this Proposed Plan is the preferred alternative for disposal of 100 Area reactor building materials.	H				Yes	Yes
SGW-44022	Rev. 0	100-BC	100-BC-5	25-Feb-10	CH2MHILL	GEOHYDROLOGIC DATA PACKAGE IN SUPPORT OF 100 BC-5 MODELING	http://idmsweb/idms/livelink.exe/fetch/200/18814/13256931/13248486/14383111/17/143831819/SGW-44022 - Rev 0 - %5B1002260415%5D.pdf?nodeid=147400962&vernum=2	Groundwater flow and transport models are being developed for the 100-BC-5 and other OUs to support the design of the pump-and-treat remedies and to evaluate the performance of the operating remedies. The groundwater flow and transport models simulate patterns of groundwater flow and other features local to each OU. This report provides details on model development and the assignment of parameter values, including the types and sources of information used to apply the model to evaluate remedy alternatives for the 100-BC-5 OU. For the purposes of this data package, the principal contaminant of concern in the 100-B/C Area is hexavalent chromium. Hexavalent chromium is present in the groundwater in the 100-B/C Area, exceeding both aquatic and drinking water standards. Sodium dichromate, the source of the hexavalent chromium, was delivered and used in both dry chemical powder and concentrated liquid forms.	D,H, P	G, Z	S, X		NO	NO
DOE/RL-2008-46-ADD3	Rev. 0	100-BC	100-BC	2009	DOE/RL	Integrated 100 Area Remedial Investigation/Feasibility Study Work Plan Addendum 3: 100 BC-1, 100-BC-2, and 100-BC-5 Operable Units	http://idmsweb/idms/livelink.exe/fetch/200/18814/13256931/13248486/14383111/17/143831819/DOE-RL-2008-46-ADD3 - Rev DFTA - %5B10051803029%5D.pdf?nodeid=149504782&vernum=2	The work plan implements an approach designed to reach final remediation decisions, describes key features of the planning process to support implementation of this approach, and provides important key regulatory considerations and risk assessment uncertainties common to the 100 Area decision units. This document, Addendum 3 to the work plan, provides site-specific information for the 100-BC Decision Unit. The 100-BC Decision Unit includes the 100-BC-1 and 100-BC-2 source OUs. The 100-BC-5 OU is a groundwater OU located in the 100-BC Area. Figure ES-1 shows the location of the 100-BC Decision Unit and proximity to other decision units. This addendum is based on the premise that there are data gaps and uncertainties that should be addressed to support final remediation decisions. In the 100-BC Decision Unit, substantive work to monitor groundwater, remove contaminated soils, and remove facilities has been completed over the past decade or is planned over the next few years. The results of these activities provide the basis for identifying the remaining uncertainties needed to be addressed to make final remediation decisions.	D, H, P	G, Z, T	Y, S, X	M	NO	NO
BHI-00280	Rev. 0	100-BC	100-BC-5	1-Apr-95	BHI, R.F. Raidl	DATA VALIDATION REPORT FOR 100-BC-5 OU ROUND SEVEN GROUNDWATER SAMPLING DATA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196011977	The objectives of this data validation project are to provide Bechtel Hanford Inc. with reliable environmental data regarding the 100-BC-5 Operable Unit Round 7 Groundwater Investigation. Positive and negative blank contamination was detected in numerous samples. Minor matrix spike and analytical spike accuracy problems were noted for several samples in two sample delivery groups. Minor ICP serial dilution precision problems were encountered in two delivery groups. Laboratory duplicate precision problems were noted in one delivery group. All associated sample results were flagged accordingly.	D,P		Y		NO	NO
BHI-00409	Rev. 0	100-BC	100-BC-5	1-Mar-96	BHI	DATA VALIDATION SUMMARY REPORT FOR 100-BC-5 OU ROUND EIGHT GROUNDWATER SAMPLING	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196083631	The information provided in this validation summary report includes data from the chemical analyses of samples from the 100-BC-5 Operable Unit Round 8 Groundwater Sampling Investigation. All of the data from this sampling event and their related quality assurance samples were reviewed and validated to verify that the reported sample results were of sufficient quality to support decisions regarding remedial actions performed at this site. Sample analyses included metals, general chemistry and radiochemistry. Fifty-seven metals samples were analyzed by Quanterra Environmental Services (QTES) and Lockheed Analytical Services (LAS). The metals samples were validated using Westinghouse-Hanford protocols specified in Data Validation Procedures for Chemical Analyses, WHC-SD-EN-SPP-002, Rev. 2. All metals data were qualified based on this guidance. Sample number BOFW1 in SDG No. W0512 was cancelled because of improper preparation, and therefore was not available for validation.	D,P		Y		NO	NO
BHI-00556	Rev. 0	100-BC	100-BC-5	1-Mar-96	BHI	DATA VALIDATION SUMMARY REPORT FOR 100-BC-5 OU ROUND NINE GROUNDWATER SAMPLING PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196089847	The information provided in this validation summary report includes chemical analyses of samples from 100-BC-5 Operable Unit Round 9 Groundwater sampling data. Data from this sampling event and their related quality assurance (QA) samples were reviewed and validated in accordance with Westinghouse Hanford Company (WHC) guidelines at the requested level. Sample analyses included metals, general chemistry, and radiochemistry. Sixty metals samples were analyzed by Quanterra Environmental Services (QES) and Lockheed Analytical Services (LAS). The metals samples were validated using WHC protocols specified in Data Validation Procedures for Chemical Analyses (WHC 1992a). All qualifiers assigned to the metals data were based on this guidance.	D,P		Y		NO	NO
DOE/RL-2004-30	Rev. 1	100-BC	100-BC-5	2005	DOE/RL	Waste Control Plan for the 100-BC-5 Operable Unit	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA451655	This Waste Control Plan (WCP) applies to the management of investigation derived waste (IDW) generated from groundwater well sampling, aquifer sampling tube and seep sampling, aquifer testing, groundwater well or aquifer tube installation and development, well maintenance, decommissioning and alteration, water level measurements (both manual and transducer), screening analysis liquids, geophysical logging, and equipment decontamination for the 100-BC-5 Operable Unit investigations, as appropriate. The scope of work for the 100-BC-5 Operable Unit is further described in the 100-BC-5 Operable Unit Sampling and Analysis Plan (SAP) (DOE/RL-2003-38). That SAP covers the informally-defined 100-BC-5 groundwater interest area; which includes the operable unit and surrounding area. Attachment 1 of this WCP identifies specific IDW management.	D				NO	NO

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DOE/RL-2004-53	Rev. 0	100-BC	100-BC-1	2004	DOE/RL	100-BC PILOT PROJECT FIELD SAMPLING PLAN FOR 2004 SAMPLING	http://www5.hanford.gov/arpir/?content=findpage&AKey=D6159391	This updated field sampling plan (FSP) for the 100-B/C Pilot Project describes the activities that are planned for the second round of sampling that will take place in calendar year 2004. The original FSP was designed to sample contaminants of potential concern (COPCs) in the media that had the greatest potential for accumulation. The COPCs were determined from an extensive list of contaminants during the data quality objectives process 03HI 2003. The original sampling and analysis plan (SAP) was designed such that data could be evaluated using a screening-level approach. Under the screening-level approach, the occurrence of an elevated concentration of a COPC in an abiotic exposure medium could trigger future sampling in biota. The analytical results from the fast round of sampling were screened against reference values and one or more standards for protectiveness, then a decision was made whether to expand the sampling for those COPCs in the second year of sampling.	D	G,Z,E			NO	NO
DOE/RL-2007-13	Rev. 0	100-BC	100-BC	2007	DOE/RL	Sampling and Analysis Plan for High-Resolution Resistivity Correlation for the BC Cribs and Trenches Area	http://www5.hanford.gov/arpir/?content=findpage&AKey=DA06261338	This sampling and analysis plan (SAP) describes the ongoing evaluation of potential applications of the electrical resistivity characterization (ERC) geophysical method to the vadose zone in the BC Cribs and Trenches Area. The ERC geophysical method detects change in el resistivity in the vadose zone where sufficient moisture exists. The distribution of anions and cations, such as nitrate, that are associated with the resistivity changes may be inferred from the ERC scans. The distribution of contaminants of potential concern (COPCs) that are associated with the detected anions or cations , such as technetium-99, also may be inferred from the ERC scans. Technetium-99 and nitrate are both COPCs i the BC Cribs and Trenches Area vadose zone and are expected to be co-located because they have similar partition coefficients.	D,P				NO	NO
DOE/RL-2009-61	Rev. 0	100-BC	100-BC	2009	DOE/RL	Sampling and Analysis Plan for Four Groundwater Monitoring Wells in the 100-BC Decision Unit	http://www2.hanford.gov/arpir/?content=findpage&AKey=0909110453	This sampling and analysis plan (SAP) was written in support of the remedial investigation (RI)/ feasibility Study (FS) process for the 100-BC Decision Unit to refine the definition of nature and extent of groundwater contaminants in the unconfined aquifer at four locations. The 100-BC Decision Unit is located on the Hanford Site in Southeastern Washington State and is associated with two source operable units (GUs), 100-B/C- 1 and 100-BC-2. The 1100-BC-5 Groundwater OU underlies the two sources GUs. While more extensive RI/FS data collection activities are currently being planned, project and regulatory staff have agreed to four new groundwater monitoring wells should be expedited to allow for modification of planned future activities if deemed necessary based on the data collected from these wells. This SAP describes the sampling and analysis to be performed associated with the installation and sampling while drilling for four expedited groundwater monitoring wells.	D,P	G,Z,E			NO	NO
DOE/RL-88-30	Rev. 2, Vol. 2	100 AREA 200 AREA 300 AREA	100 AREA 200 AREA 300 AREA	1992	DOE/RL	HANFORD SITE WASTE MANAGEMENT UNITS REPORT	http://www5.hanford.gov/arpir/?content=findpage&AKey=D196130970	This report summarizes the operable units in several areas of the Hanford Site Waste Facility. Each operable unit has several waste units (crib, ditch, pond, etc.). The operable units are summarized by describing each waste unit. Some of the descriptions are unit name, unit type, waste category start date, site description, etc. The descriptions will vary for each waste unit in each operable unit and area of the Hanford Site.	D,P	G	Y	A	NO	NO
DOE/RL-91-25		100-BC, 1100-EM, 200-BP, 300- FF, 100-HR, 100-DR, 100-IU, 100- KR, 100- KW, 100- KE, 100- NR, 100-FR, 100-FR	100-BC, 1100-EM, 200-BP, 300-FF, 100- HR, 100- DR, 100- IU, 100- KR, 100- KW, 100- KE, 100-NR, 100-FR	1991	DOE/RL	Environmental Restoration and Waste Management Site Specific Plan for DOE-RL Five Year Plan FY 1993 Through 1997	http://www5.hanford.gov/arpir/?content=findpage&AKey=D196072700	This document was prepared to implement and support the U.S. Department of Energy -Headquarters (DOE-HQ) national plan. The national plan, entitled Environmental Restoration and Waste Management Five-Year Plan (DOE 1990b) (hereinafter referred to as the DOE-HQ Five-Year Plan), is the cornerstone of the U.S. Department of Energy's (DOE) long-term strategy in environmental restoration and waste management. The DOE-HQ Five-Year Plan addresses overall philosophy and environmental and waste-related activities under the responsibilities of the DOE Office of Environmental Restoration and Waste Management. The plan also reaffirms DOE-HQ goals to bring its nuclear sites into environmental compliance in cooperation with its regulators and the public, and to clean up and restore the environment by 2019.	D	E	Y		NO	NO
DOE/RL-96-17	Rev. 5,	100-BC, 100-D, 100- H, 100-F, 100-K	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1	2004	DOE/RL	REMEDIAL DESIGN REPORT REMEDIAL ACTION WORK PLAN FOR 100 AREA	http://www5.hanford.gov/arpir/?content=findpage&AKey=D6542354	The primary purpose of this remedial design report/remedial action work plan (RDR/RAWP) is to describe the design and the implementation of the remedial action processes. This document streamlines the requirements; the RDR and RAWP are combined to cover both the remedial design and remedial actions. This document pertains to all of the waste sites included in the Interim Action ROD, the ROD Amendment, the Remaining Sites ROD, and the 100 Area Burial Grounds ROD (as described in Section 1.3), and provides a basis that could be followed, with minimal additions, by future 100 Area source OU RODs. The RAOs identified in the RODs apply to contaminants in soils, structures, and debris. The Interim Action ROD specifically defines three RAOs. The Remaining Sites ROD specifically defines two RAOs, which are the same as the first two RAOs in the Interim Action ROD.	D,P	G,Z,E	Y		NO	YES
HNF-27205-FP	Rev. 0	100-BC	100-BC	2005	M. Benecke, D.F. Rucker, M.D. Sweeney	The BC Cribs and Trenches Geophysical Characterization Project: One Step Forward in Hanford's Cleanup Process	http://www.osti.gov/bridge/product_biblio.jsp?query_id=1&page=0&osti_id=860883	Several planned and unplanned radiological releases have occurred to the subsurface within the vadose zone at the Hanford Site. Several of these releases have resulted in contamination of the groundwater. One of the planned releases occurred at the BC Crib and Trenched area, a 50-Acre disposal site located south of the 200 East facility. The site contains 20 unlined trenches ranging in length from about 30m to 170m and 6 mi. Within the time period from 1956 to 1958, approximately 30 Mgal of mixed liquid waste (radiological and hazardous waste) was discharged to the trenches and cribs.	D,P	G,Z,E	Y,P	A	NO	NO

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PNNL-18800		100-BC	100-BC	2009	PNNL,	Characterization of Sediments from the Soil Desiccation Pilot Test (SDPT) Site in the BC Cribs and Trenches Area	http://www.pnnl.gov/main/publications/external/technical_reports/PNNL-18800.pdf	This technical report documents the results of laboratory geochemical and hydrologic measurements of sediments collected from new borehole 299-E13-65 (C7047) and comparison of the results with those of nearby borehole 299-I3E-62 (C5923) both drilled in the BC Cribs and Trenches Area. The total and water-leachable concentration of key contaminants will be used to update contaminant-distribution conceptual models and to provide more data for improving baseline risk predictions and remedial alternative selections. Improved understanding of subsurface conditions and methods to remediate these principal contaminants can also be used to evaluate the application of specific technologies to other contaminants across the Hanford Site.	D	G,Z	Y	A	NO	NO
WHC-SD-ER-TI-006	Rev. 0	100-BC, 100-K, 100-H, 100-N	100-BC, 100-K, 100-H, 100-N	1991	R.K. Ledgerwood	Summaries of Well Construction Data and Field Observations for Existing 100 Aggregate Area Operable Unit Resource Protection Wells	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196076165	This document summarizes available construction data and field observations for existing resource protection groundwater wells within or associated with the 100 Aggregate Area, Hanford Site. Construction data and field observation summaries tabulate pertinent construction data and results of field observations of the wells. Preliminary recommendations for remediation based on this data are also provided. The as-built drawing of "Well Construction and Completion Summary" is based on review of existing drilling records and the results of field observations.	D	G,Z	Y	A	NO	NO
BHI-00414	Rev. 00	100-BC	100-BC	1995	Roberta E. Day, Bechtel Hanford Inc.	100-BC Subproject (ADS 3105) Baseline Summary	http://rimyuweb.rl.gov/rimyu/default.asp?pid=CP049084	The U.S. Department of Energy (DOE) has been assigned cleanup responsibility for sites contaminated during 50 years of plutonium production, fuel processing, and fuel fabrication at the 100,200, and 300 Areas of the Hanford Site. The DOE's Environmental Restoration Contractor (ERC) team will perform the required activities to remediate these waste sites. These activities will include testing, sampling, characterization, decontamination and decommissioning (D&D), shipment, transportation, and disposal of the remediated waste.					NO	NO
WHC-SD-EN-TI-213	Rev. 0	100-BC	100-BC	1994	K.A. Bergstrom	Geophysical investigations of French Drain 116-B-9, and Dry Well 116-B-10, 100 B/C Area	http://www.osti.gov/bridge/product.biblio.jsp?query_id=3&page=0&osti_id=1019939	French Drain 116-B-9 and Dry Well 116-B-10 are both located within the 100 B/C-2 Operable Unit, 100 B/C Area (Figure 1). The 116-B-9 French Drain is approximately 4 ft in diameter by 3 ft deep. The exact location and use of the drain is not clear. The 116-B-10 Dry Well is a 3 ft-diameter, tile-lined well on a concrete slab, 7 ft below the surface, overlain by a manhole cover (DOE-RL 1991). The exact location of the well is uncertain. The objective of the survey was to locate the Dry Well and the French Drain. The area to be investigated had several buildings in the area which subsequently have been torn down. Ground penetrating radar (GPR) was the geophysical method chosen for the investigation.	D				NO	NO
CVP-2007-00006	Rev. 0	100-BC	100-BC	2007	J. M. Capron	Cleanup Verification Package for the 118-B-1, 105-B Solid Waste Burial Ground	http://www.osti.gov/bridge/product.biblio.jsp?query_id=7&page=0&osti_id=945224	This cleanup verification package documents completion of remedial action, sampling activities, and compliance criteria for the 118-B-1, 105-B Solid Waste Burial Ground. This waste site was the primary burial ground for general wastes from the operation of the 105-B Reactor and P-10 Tritium Separation Project and also received waste from the 105-N Reactor. The burial ground received reactor hardware, process piping and tubing, fuel spacers, glassware, electrical components, tritium process wastes, soft wastes and other miscellaneous debris.	D, H		Y		NO	NO
RSVP-2006-057		100-BC	100-BC	2006	L. M. Dittmer	Remaining Sites Verification Package for the 120-B-1, 105-B Battery Acid Sump, Waste Site Reclassification Form 2006-057	http://www.osti.gov/bridge/product.biblio.jsp?query_id=7&page=0&osti_id=944129	The 120-B-1 waste site, located in the 100-BC-1 Operable Unit of the Hanford Site, consisted of a concrete battery acid sump that was used from 1944 to 1969 to neutralize the spent sulfuric acid from lead cell batteries of emergency power packs and the emergency lighting system. The battery acid sump was associated with the 105-B Reactor Building and was located adjacent to the building's northwest corner. The results of verification sampling demonstrated that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also showed that residual contaminant concentrations are protective of groundwater and the Columbia River.	D, H		Y		NO	NO
HW-50351-Del.		100-BC	100-BC	1957	R. C. Walker	Re-evaluation of Ball 3X Recovery System improvements, 105-B, D, DR, F, and H	http://www.osti.gov/bridge/product.biblio.jsp?query_id=7&page=0&osti_id=1012818	Since the installation of Ball 3X equipment on the older reactors, several inadvertent ball drops have been experienced, many of which have required considerable recovery time. Furthermore, it is very probable that these recovery times be significantly increased subsequent to the proposed installation of air accelerated vertical safety rods. Because of this, interest has been expressed by reactor operations personnel toward provision of a ball recovery system which would substantially reduce these outages.					NO	Yes
RL-REA-2244		100-BC	100-BC	1965	R.W. Wood	Front-face hardware modification 105-C Reactor	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=10174071	C reactor installed 425 impact extruded aluminum CGI-558 type nozzles and front face components in July of 1964. These nozzles complimented an existing 111 CGI-558 type nozzles located in the old operational charge-discharge (OCD) pattern and were authorized under an addendum to Design Change 812. The objective of this document is two-fold: first, to discuss the hardware modifications and their effect on reactor operating conditions; and second, to present pertinent hydraulic information. The basis and justification for the hardware modifications are covered in Design Change 1076.	D, H				NO	NO
CVP-2006-00011	Rev. 0	100-BC	100-BC	2007	M. J. Appel, J. M. Capron	Cleanup Verification Package for the 118-C-1, 105-C Solid Waste Burial Ground	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=945295	This cleanup verification package documents completion of remedial action for the 118-C-1, 105-C Solid Waste Burial Ground. This waste site was the primary burial ground for general wastes from the operation of the 105-C Reactor and received process tubes, aluminum fuel spacers, control rods, reactor hardware, spent nuclear fuel and soft wastes.	D		Y	A	NO	NO
RSVP-2008-002		100-BC	100-BC	2008	L. M. Dittmer	Remaining Sites Verification Package for the 116-C-3, 105-C Chemical Waste Tanks, Waste Site Reclassification Form 2008-002	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=944165	The 116-C-3 waste site consisted of two underground storage tanks designed to receive mixed waste from the 105-C Reactor Metals Examination Facility chemical de-jacketing process. Confirmatory evaluation and subsequent characterization of the site determined that the southern tank contained approximately 34,000 L (9,000 gal) of de-jacketing wastes, and that the northern tank was unused. In accordance with this evaluation, the verification sampling and modeling results support a reclassification of this site to Interim Closed Out. The results of verification sampling demonstrate that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also show that residual contaminant concentrations are protective of groundwater and the Columbia River.	D, H		Y		NO	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
RSVP-2006-016		100-BC	100-BC	2006	R. A. Carlson	Remaining Sites Verification Package for the 118-C-3.3, 105-C French Drains, Waste Site Reclassification Form 2006-016	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=945034	The 118-C-3.3 french drains received condensate from the steam heating system in the 105-C Reactor Building. The 118-C-3.3 french drain meets the remedial action objectives specified in the Remaining Sites ROD. The results demonstrate that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.	D, H		Y		NO	NO
HW-48447		100-BC	100-BC	1957	G.A. Newell	Revision of horizontal control rods to permit utilization of neutrons for by-product production, 105-C, 105-KE, 105-KW	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=10138289	The purpose of this budget study is to analyze the problems involved at 105-C, 105-KE, and 105-KW Buildings to revise the existing horizontal control rods to permit utilization of neutrons for by-product production, compare alternate solutions, and provide necessary budget data on the proposed solution. The sponsor of this budget study is Reactor Operations.	D				NO	Yes
HW-68963		100-BC	100-BC	1961	C.A. Munro	105-C overboring thirteen tube outage, March 6, 1961–March 10, 1961	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=10141822	C Reactor was shut down on a scheduled basis at 8:30 a.m. March 6, 1961 for the purpose of overboring 17 process channels. This report will cover that outage and discuss problems encountered in completing the tasks involved in overboring.	D				NO	NO
WHC-SD-TP-DAP-010	Rev. 0	100-BC	100-BC	1996	W. A. McCormick	Documentation and analysis for packaging for the 100 B/C Packagings	http://www.osti.gov/bridge/product.biblio.jsp?query_id=3&page=0&osti_id=659289	The purpose of this Documentation and Analysis for Packaging (DAP) is to certify that the packaging system currently in use for the 100 B and C Area large scale excavation and remediation campaign, meets the intent of U.S. Department of Transportation (DOT) requirements for bulk packaging (49 CFR 173.427) of radioactive materials, up to and including low specific activity (LSA) I quantities of Class 7 material.	D		Y	A	NO	NO
ERA-NRE-93-055		100-BC	100-BC	1993	L. D. Smith, R. K. Murray, JW Rogers	Measured thermal and fast neutron fluence rates, ATR Cycle 100-BC, April 23, 1993–May 13, 1993	http://www.osti.gov/bridge/product.biblio.jsp?query_id=5&page=0&osti_id=10194973	This report contains the thermal (2200 m/s) and fast (E>1MeV) neutron fluence rate data for ATR Cycle 100-BC which were measured by the Radiation Measurements Laboratory (RML) as requested by the Power Reactor Programs (ATR Experiments) Radiation Measurement Work Order. This report contains fluence rate values corresponding to the particular elevations (relative to the 80 ft. core elevation) where the measurements were taken. The data in this report consists of (1) a table of the ATR power history and distribution, (2) a hard copy listing of all thermal and fast neutron fluence rates, (3) plots of both the thermal and fast neutron fluence rates, and (4) a magnetic record (3.5 inch diskette) containing a listing of only the fast neutron fluence rates, the assigned elevations and proper header identification of all monitor positions contained herein.					NO	NO
HW-80164		100-BC	100-BC	1963	C. R. Barker, J. R. Young	Rear face hardware replacement 105-B, D, DR, F, and H	http://www.osti.gov/bridge/product.biblio.jsp?query_id=7&page=0&osti_id=10142135	Prior to the use of venturis on the front of the B, D, DR, P, and H Reactors, much of the pressure and velocity heads developed by the 190 process water pumps were used in overcoming built-in frictional losses in the system external to the process tubes. As Reactor Technology was gained, changes were continually taking place. Venturis replaced orifices installed during original construction. Hydraulically efficient front nozzles, front pigtails, front adaptors, and a second generation of front venturis were designed and installed as a part of Project CG-558. Process changes, such as eliminating upstream dummy charges, were also made to reduce the energy dissipation due to frictional losses. The pressure drop across the active section of a fuel charge was reduced by the internal flow passage in the I & E elements. Little has been done to date, however, to reduce the pressure drops in the rear face fittings. This report is intended to review some of these still existent pressure restrictions and to discuss possible future courses of action.					NO	NO
HW-27318		100-BC	100-BC	1953	H.T. Wells	Installation of reactor gas refrigeration system -- 105-C, Project C-431	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=10188193	It is recommended that the Design Committee approve the installation of a refrigeration system in the 105-C gas circulation system for removal of moisture from the reactor following a process tube leak as was previously approved by the C-431 Project Committed. Engineering studies show that this refrigeration system is necessary to provide sufficient water removal capacity in order that the water absorbing capacity of the system furnished by the silica gel towers will not be a limit to the rate at which a reactor can be rehabilitated following a serious leak.	D		Y,S,X		NO	NO
HW-70128		100-BC	100-BC	1961	F.J. Mollerus, Jr.	Process tube expansion: 105-C conversion to self-supported fuel elements	http://www.osti.gov/bridge/product.biblio.jsp?query_id=10&page=0&osti_id=10150004	A method of reducing gas leakage and rear fate maintenance is to fix the rear gunbarrel and process tube to the shield and eliminate the need for a rear expansion bellows. This arrangement is being considered as part of the C-reactor conversion to self-supported fuel element program. The fixed rear gunbarrel will require that all hydraulic load and thermal expansion elongation of the tube be taken through the front bellows. In the event that tubes freeze in their channels, forces due to thermal expansion and hydraulic pressure will be transmitted to the rear shield if the tube and rear gunbarrel are fixed to the shield. Calculated maximum forces which can be transmitted to the shield are given in this report. The probability and amount of restraint which can occur in the tube are discussed. Finally, methods of insuring that the restraint does not cause excessive forces on the rear shield are discussed.					NO	NO
36014	Draft. B	100-BC, 100-DR, 100-HR	100-BC-1 100-DR-1 100-HR-1	1996	DOE/RL, G.I. Goldberg	EXPLANATION OF SIGNIFICANT DIFFERENCE FOR INTERIM REMEDIAL ACTION RECORD OF DECISION FOR 100-BC-1 100-DR-1 100-HR-1 OU DRAFT B	http://www5.hanford.gov/arpir/content.jsp?page&AKey=D197141942	This data compilation report contains an inventory of readily available information on existing groundwater wells, hydrology, and geology that can be used by RI/FS investigators. It is intended as a reference document that describes the available data, when data were collected, and how the data can be accessed. It has been designed as a supplement to other reports that evaluate existing information relative to past-practices objectives. The document will be updated periodically to reflect the installation of new monitoring wells; rehabilitation and remediation of existing wells; and new geologic, hydrologic, and groundwater chemistry information. The geographic area covered by this data compilation includes that portion of the Hanford Site north of Hanford gridline N56,000 (Figure 1-1). An attempt has been made to document all known wells that have been drilled in this area and all readily available groundwater chemistry and water-level data. The information search has focused on existing electronic databases and data compilations such as Hanford Wells.	D, H		Y, S		NO	NO

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46067		100-BC, 100-DR, 100-HR	100-BC-1 100-DR-1 100-HR-1	1997	DOE/RL, G.I. Goldberg, J.E. Rasmussen	AMENDED RECORD OF DECISION DECISION SUMMARY AND RESPONSIVENESS SUMMARY 100-BC-1 100-DR-1 100-HR-1 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D19722532	This decision document changes components of the selected interim remedial action for the Hanford 100 Area radioactive liquid effluent disposal sites and clarifies the role of revegetation of remediated sites with respect to the completion of the remedial actions. The Interim Remedial Action ROD for the 100 Area radioactive liquid effluent disposal sites signed in September 1995 selected excavation, treatment as necessary or appropriate, and onsite disposal for 37 waste sites in the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units at an estimated cost of \$491 million.	H				NO	Yes
9207479		100-BC	100-BC-1	1992	DOE/RL, S.H. Wisness	VALIDATED DATA FOR 100- BC-1 OU LIMITED FIELD INVESTIGATION	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196116800	The reports include data summary tables describing analyte concentrations for each sample, and a case summary of data package validation. The data was validated by a review of laboratory performance and implementation of appropriate procedures per Data Validation Procedures for Chemical Analyses, WHC-SD-EN-SPP-002, Revision 1, dated April 1, 1992, and Data Validation Procedures for Radiological Analyses, WHC-SD-EN-SPP-001, Revision 0, dated January 21, 1992.				NO	NO	
0100X-IG-G0001		100-BC, 100-DR, 100-HR	100-BC-1 100-DR-1 100-HR-1	1996	BHI, W.S. Thompson	FIELD INSTRUCTION GUIDE FOR REMEDIATION OF 100-BC- 1 100-DR-1 100-HR-1 WASTE SITES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199021854	This Field Instruction Guide (FIG) provides direction to field analytical personnel for implementing the 100-BC-1, 100-DR-1, and 100-HR-1 Sampling and Analysis Plan (SAP) (DOE-RL, 1996). The SAP is the controlling document in performing work. All references to the SAP are italicized to distinguish SAP references from FIG references. This FIG will be revised as field conditions dictate or when upper-tier requirements in the SAP are changed. The FIG is issued and controlled as an instruction guide. All revisions to the FIG will be approved by the Resident Engineer using a Design Change Notice (DCN). The Resident Engineer for each of the remediation projects covered by the SAP will provide directions as needed, as described in this guide. A Sample Authorization Form (SAF) will be prepared for each remedial action activity that provides analytical parameters, analytical methods, sample container type and volume, and holding time for each laboratory (Standard Fixed Laboratory [SFL], Quick Turnaround Laboratory [QTL]).	D		Y		NO	NO
07-KBC-0041	Rev. 2A	100-BC	100-KR-2	2007	DOE/RL, K.A. Klein	SAMPLING AND ANALYSIS PLAN FOR 105-KE BASIN MONOLITHS KBC-24414 DRAFT REV 2A	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA05001909	This Sampling and Analysis Plan is a deliverable per Section 4.2, of the Remedial Design Report and Remedial Action Work Plan for the K Basins Interim Remedial Action, DOE-RL-99-89, Revision 1, requiring U.S. Department of Energy, Richland Operations Office (RL) and EPA approval. Informal comments from RL and EPA have been received and incorporated in the subject document. The revised plan updates the rationale and strategy for sampling and analysis activities to support removal of the 105-K East Basin and pits. The plan has been changed to reduce the basin and some pits to rubble rather than produce monoliths, the sludge inventory determination has been changed to consist of the sum of residual sludge at a 93 percent/7 percent floor/canister sludge ratio and re-deposited sludge concentration, instructions have been added to support management of sand filter backwash after achieving sludge removal criteria, and the management of debris in the basin updated to reflect the results of basin work experience.	D, H			A	NO	NO
08-AMRC-0033		100-BC	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, 100- KR-2	2007	DOE/RL, D.A. Correspondence	TRANSMITTAL OF APPROVED EXPLANATION OF SIGNIFICANT DIFFERENCE FOR INTERIM ACTION RECORD OF DECISION FOR 100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-2 100-HR-3 AND 100-KR-2 OU 100 AREA BURIAL GROUNDS OCTOBER 2007	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA06144408	This ESD is being issued for the following reason: The selected remedy in the Burial Grounds ROD allow for consideration of eight "balancing factors" to determine the extent of additional excavation needed in situations where residual contamination exists below the engineered structure and at a depth greater than 4.6m (15ft). The ESD describes changes to an approved remedy that do not fundamentally alter the overall cleanup approach, and it is based on the Administrative Record. The purpose is to provide public notice of the significant changes identified herein and the information that led to the changes. Additionally, the Burial Grounds ROD requires a public involvement period of no less than 30 days prior to making any determination to invoke the balancing factors. A 30-day advanced notice announcing the public comment period was published on July 17, 2007.	D, H		Y		NO	NO
DOE/RL-96-108	Rev. 0	100-BC, 100-DR, 100-HR, 100-KR	100-BC-1, 100-DR-1, 100-HR-1, 100-KR-2	1996	DOE/RL	PROPOSED AMENDMENT TO SEPTEMBER 1995 RECORD OF DECISION FOR 100-BC-1 100- DR-1 100-HR-1 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196247366	This ROD Amendment is being proposed for the following reasons: • To expand the scope of the remedial action to include 34 additional sites within the 100 Area. These sites received similar discharges of radioactive liquid effluent as the original 37 high priority radioactive liquid waste disposal sites presented for remediation in the September 1995 ROD. The additional sites pose a similar level of risk to human health and the environment that also requires remediation. • Cost evaluations during remedial design for the original 37 sites identified significant opportunities for streamlining and coordination of remediation activities. This proposed amendment will document the status of treatment for volume reduction and revegetation efforts at 100 Area liquid waste disposal sites. Summaries for both activities are discussed in the next section.	H				NO	Yes
Not Listed		100-BC, 100-DR, 100-HR	100-BC-1 100-DR-1 100-HR-1	1995	EPA, Ecology, D.R. Sherwood, S.M. Alexander	EXAMINATION OF PROPOSED PLANS 100-BC-1 100-DR-1 AND 100-HR-1 AND SUBSEQUENT RECORD OF DECISION BY EPA ECOLOGY DOE-RL DOE-HQ AND HANFORD CONTRACTORS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196029685	Proposed Plans and Records of Decision (ROD) for the 100 Area will be developed to address source operable units (OU's) and groundwater OU's separately. The first ROD is expected to address those sites in 100-BC-1, 100-DR-1 and 100-HR-1 that received liquid radioactive effluent. This decision was made to address the public value placed on protection of the Columbia River.				A	NO	NO
18555		100-BC	100-BC-5	1995	DOE/RL , J.K. Erickson	RESPONSES TO COMMENTS ON FOCUSED FEASIBILITY STUDY FOR 100-BC-5 GROUNDWATER OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196007423	This document contains responses to comments on focused feasibility study for 100-BC-5 groundwater OU.	D				NO	NO
20626		100-BC	100-BC-1	1995	DOE/RL, N.A. Werdel	100-BC-1 DEMONSTRATION PROJECT BULK STORAGE PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D197184346	This document provides guidance for the control of waste generated as a result of the 116-13-5 (B-5), 116-13-4 (B-4), and 116-C-1 (C-1) expedited response actions.	D	G,Z			NO	NO

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22900		100-BC	100-BC-5	1995	DOE/RL, G.H.Sanders, N.A. Werdel	TRANSMITTAL OF 100-BC-5 OU ENHANCED RESPONSES TO REGULATOR COMMENTS ON FOCUSED FEASIBILITY STUDY REPORT DOE/RL 94-59 DRAFT A ADDENDUM A AND 100-BC-5 OU REVISIONS TO FOCUSED FEASIBILITY STUDY REPORT DOE/RL 94-59 DRAFT B ADDENDUM B	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195064229	Comments on the 100-BC-5 Focused Feasibility Study report were transmitted to DOE in a letter from EPA on June 21, 1995.	D				NO	NO
33112		100-BC, 100-HR	100-BC-1 100-DR-1 100-HR-1	1996	DOE/RL, G.H.Sanders, N.A. Werdel	TRANSMITTAL OF 100 AREA REMEDIATION DESIGN REPORT REMEDIATION ACTION WORK PLAN DOE/RL 96-17 REV 000 AND 100-BC-1 100-DR-1 100- HR-1 SAMPLING AND ANALYSIS PLAN DOE/RL 96- 22 REV 000 FOR FINAL APPROVAL	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196136003	This change request establishes milestones for remedial action and disposal of investigative derived waste for 37 waste sites in the 100 Area of the Hanford Site. This action is required by the Interim Record of decision for the 100-BC-1, 100-DR-1, 100-HR-1 Operable Units (EPA, 1995).	D				NO	NO
9002772		100-BC	100-BC-1	1990	EPA, D.R. Sherwood	REVIEW OF DRAFT REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR 100-BC-1 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196008499	This document contains comments from the U.S. Environmental Protection Agency, The Washington Department of Ecology and out contractors on the Draft Remediation Investigation/Feasibility Study Work Plan for the 100-BC-1 Operable Unit.	D				NO	NO
9003452		100-BC	100-BC-5	1990	EPA, D.R. Sherwood	REVIEW OF DRAFT REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR 100-BC-5 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196020220	This document contains comments from the U.S. Environmental Protection Agency, The Washington Department of Ecology and out contractors on the Draft Remediation Investigation/Feasibility Study Work Plan for the 100-BC-5 Operable Unit.	D				NO	NO
9004261		100-BC	100-BC-5	1990	DOE/RL, S.H. Wisness	DISPOSITIONS OF EPA COMMENTS ON 100-BC-5 WORK PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196023064	This document contains the dispositions of EPA comments on the 100-BC-5 Work Plan.	D				NO	NO
9055707		100-BC	100-BC-1 100-BC-5	1990	WHC, R.D. Wojtasik	DISPOSITION OF DOE-RL OFFICE COMMENTS ON DRAFT REMEDIAL INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR 100- BC-1 100-BC-5 OU AND DISPOSITION OF EPA COMMENTS ON 100-BC-1 WORK PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196029800	This document contains the disposition of U.S. Department of Energy Richland operations office comments on the draft Remedial Investigation/Feasibility Study Work Plan for the 100-BC-1 and 100-BC-5 operable units and the disposition of the U.S. Environmental Protection Agency comments on the 100-BC-1 Work Plan.	D				NO	NO
9104255		100-BC, 100-HR, 100-DR 100-BC-1 100-BC-5 100-DR-1 100-HR-1 100-HR-3	100-BC-1 100-BC-5 100-DR-1 100-HR-1 100-HR-3	1991	DOE/RL, S.H. Wisness	CERCLA PAST PRACTICE UNITS RESCOPE WORK PLANS 100-HR-1 100-DR-3 100- DR-1 100-BC-1 100-BC-5	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196078285	The rescored work plans provide individual OU schedules and a 100-Area integrated schedule in Chapter 6.0. These schedules were based on known resources (infrastructure and support systems) in fiscal years 1992 and 1993. Outyear resources are leveled to these baselines. Therefore, the schedules as presented may not show Remedial Investigation or Feasibility Study tasks that are either undefined at this time, or are resource limited.	D				NO	NO
9106062		100-BC	100-BC-1	1991	EPA, D.A. Faulk	REVIEW OF DRAFT REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR 100-BC-1 OU DATED SEPTEMBER 1991	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196083539	This document contains the comments from the U.S. Environmental Protection Agency (EPA), the Washington State Department of Ecology (Ecology), and their contractors on the rescored Draft Remedial investigation/Feasibility Study Work Plan for the 100-BC-1 Operable Unit.	D				NO	NO
9201742		100-BC	100-BC-1	1992	DOE/RL, S.H. Wisness	SUBMITTAL OF 100-BC-1 REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN DRAFT C FOR PUBLIC COMMENT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196091400	This work plan incorporates all EPA comments (reference: Letter, dated December 23, 1991, D. A. Faulk, EPA, to J. D. Good enough, RL, "Review of the Draft Remedial Investigation/Feasibility Study Work Plan for the 100-BC-1 Operable Unit, Hanford Site, Richland Washington, dated September 1991") as discussed in various meetings held since January 1992 (most comments were addressed at a meeting held on February 10, 1992).					NO	NO
9203156		100-BC	100-BC-1	1992	DOE/RL, S.H. Wisness	SUBMITTAL OF 100-BC-1 OU REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN REV 000 FOR APPROVAL	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196104335	The work plan schedules identify four interim milestones (IMs). EPA directed RL to include three of these IMs into the 100-BC-1 OU task schedule (EPA ltr. I to J. D. Good enough from D. A. Faulk, "Review of the Draft Remedial Investigation/Feasibility Study Work Plan for the 100-BC-1 Operable Unit, Hanford Site, Richland Washington, dated September 1991," dd December 23, 1991). IM completion dates were negotiated during comment resolution meetings, and have been updated to reflect discussions and agreements between EPA and RL that occurred during May and June 1992.					NO	NO
9306212		100-BC	100-BC-1	1993	EPA	EPA COMMENTS ON 100-BC-1 LIMITED FIELD INVESTIGATION AND RISK ASSESSMENT REPORTS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196111015	The LFI report summarizes the qualitative risk assessments described in the July 1993 revised Qualitative Risk Assessment Form the 100-BC-1 Source Operable Unit (QRA) report and identifies high priority IRM candidate sites. During the section of IRM candidate sites, the magnitude of potential human and ecological risks that exceeded Washington State Model Toxics Control Act Method B regulatory limits and current impacts on groundwater are considered.	D				NO	NO
9306356		100-BC	100-BC-5	1993	EPA, D.A. Faulk	TRANSMITTAL OF EPA COMMENTS ON 100-BC-5 LIMITED FIELD INVESTIGATION AND QUALITATIVE RISK ASSESSMENT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196106561	The U.S. Environmental Protection Agency (EPA) has completed our review of the 100-BC-5 Limited Field Investigation Report (LFI) and Qualitative Risk Assessment (QRA). Attachment one contains the LFI comments and attachment two contains the QRA comments.	D				NO	NO
9306624		100-BC	100-BC-2	1993	EPA, D.A. Faulk	EPA COMMENTS ON 100-BC-2 OU WORK PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196115204	Enclosed are the comments from the U.S. ZI Environmental Protection Agency (EPA) on the 100-BC-2 Operable Unit Work Plan.	D				NO	NO
9401590		100-BC	100-BC-2	1994	DOE/RL, S.H. Wisness	SUBMITTAL OF 100-BC-2 OU REMEDIATION INVESTIGATION FEASIBILITY STUDY WORK PLAN REV 000 DOE/RL 91-07 FOR APPROVAL	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196093300	The work plan activity schedule identifies four potential interim milestones (IMs), as agreed by RL, EPA, and State of Washington Department of Ecology 100-BC-2 OU managers, for consideration by the Hanford Tri-Party Agreement Project Managers.	D				NO	NO
SD-EN-AP-070	Rev. 2	100-BC	100-BC-5	1992	WHC, J.W. Roberts	DESCRIPTION OF WORK FOR 100-BC-5 GROUNDWATER OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196090595	This description of work details the field activities associated with cable-tool drilling of groundwater wells in the 100-BC-5 Operable Unit (Task 6) and will serve as a field guide for those performing the work. It should be used in conjunction with the Remedial Investigation/Feasibility Study Work Plan for the 100-BC-5 Operable Unit, Hanford Site, Richland, Washington (DOE/RL 1991) for general investigation strategy and with Environmental Investigations and Site Characterization Manual (WHC 1988c) for specific procedures.	D	G.Z	Y		NO	NO

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BHI-01384	Rev. 0	100-BC	100-BC-1	2000	BHI	105-B REACTOR B-REACTOR MUSEUM FEASIBILITY ASSESSMENT PHASE II PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8406867	The purpose of this report is to provide the basis and supporting documentation necessary to reach a consensus on a cost-effective approach to prepare the B Reactor as a facility open for partial public tours with unescorted access. Final decisions on balancing among the mitigation of hazards, costs, and historical significance will be made by RL in cooperation with the B Reactor Museum Association (BRMA). The objective of the 105-B Reactor Museum feasibility assessment (Phase II) project is to assess and document activities needed to prepare designated areas of the B Reactor for use as a facility for public tours with unescorted access; it is not intended to address issues such as presentation of displays or the general ambiance necessary to create a museum. Therefore, this Phase II assessment evaluates hazards and provides designs and associated costs for the purpose of engineering safety improvements to mitigate potential hazards to the environment and those hazards that could pose a threat to persons touring the B Reactor.	D, H				NO	NO
BHI-01385	Rev. 0	100-BC	100-BC-1	2000	BHI, P.W. Griffin	105-B REACTOR B-REACTOR MUSEUM PHASE II PROJECT SUPPLEMENTAL COST ESTIMATE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8406763	This document serves as a supplement to BHI-01384, 105-B Reactor Museum Feasibility Assessment (Phase II) Project, prepared for Bechtel Hanford, Inc. by MACTEC, Inc. (BHI 2000). The Phase II 105-B Reactor assessment was performed to provide a basis for identifying and mitigating the hazards in specific areas of the B Reactor facility to support public tours. This supplemental report provides a broad overview of required actions with a rough order-of-magnitude cost estimate for mitigating hazards in additional areas of the facility with regard to public access and staff assigned to the building. The purpose of this supplemental assessment is to identify the potential hazards within those areas outside of the existing tour route at the 105-B Reactor facility and to provide a rough order-of-magnitude cost estimate for mitigating these hazards within the additional proposed tour areas. This supplement is not a substitute for a detailed engineering analysis and cost estimate, but is intended to provide an overview of the actions required to expand the existing tour area while providing general cost information to assist in evaluating the various tour alternatives and other uses of the facility.	D, H				NO	NO
	100-BC	100-BC-1	1964	AEC-GE Study Group	CATALOG OF HANFORD BUILDINGS AND FACILITIES 100 AREAS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196008076	Recognizing that shutdown of reactors and supporting facilities could have an unfavorable impact on the local economy, the Atomic Energy Commission has undertaken, in the past two years, a number of steps to stimulate diversification of the economic base of the region. One of the steps was established by AEC Headquarters of the "Atomic Energy Commission - General Electric Company (AEC-GE) Study Group for the Economic Development of Richland," consisting of P. G. Holsted, AEC, and F. W. Albaugh, GE. In the course of its work, the Study Group concluded that a concise, but relatively comprehensive, description of the facilities at Hanford would be useful for use in diversification activities and, therefore, arranged for the compilation and publication of this document.	D				NO	NO	
CVP-2003-00014	Rev. 0	100-BC	100-BC-1	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 100-B-5 EFFLUENT VENT DISPOSAL TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5628475	This cleanup verification package (CVP) documents completion of remedial action for the 100-B-5 Effluent Vent Disposal Trench (also referred to as the 100-13-5 site). The 100-8-5 site was not a planned or constructed waste disposal site. The site is the result of reactor cooling water effluent leakage from a vent pipe located at a 105-B and 105-C Reactor effluent pipelines junction box. The leakage followed the contour of the ground surface running north of the junction box before percolating into the ground surface. The site was not classified as an unplanned release, because the leakage occurred multiple times over a period of at least two years from 1954 to 1956.	D, H		Y	M	NO	NO
CVP-2003-00022	Rev. 0	100-BC	100-BC-1	2004	BHI	CLEANUP VERIFICATION PACKAGE FOR 100-B-8:1 100-C-6:1 100-BC SOUTH EFFLUENT PIPELINES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5635313	This cleanup verification package (CVP) documents completion of remedial action for the 100-B/C effluent pipeline subsites located south of B Avenue (100-B-8:1 and 100-C-6:1, hereinafter collectively referred to as the 100-B/C south pipelines site). The 100-B/C south pipelines site is located within the 100-BC-1 and 100-BC-2 Operable Units of the 100-B/C Area. The 100-B/C Area is located near the Columbia River in the northwestern region of the Hanford Site. The 100-B/C south pipelines range from approximately 650 m (2,130 ft) to approximately 1,400 m (4,590 ft) from the Columbia River. The waste sites included in this CVP are the 100-B-8:1 and 100-C-6:1 subsites of the 100-B/C process effluent pipelines.	D,H,P	Z	Y		YES	NO
CVP-2003-00019	Rev. 0	100-BC	100-BC-1	2004	BHI	CLEANUP VERIFICATION PACKAGE FOR 100-B-8:2 100-C-6:2 100-C-6:3 AND 100-C-6:4 100-C-6:3 AND 100-C-6:4 100-BC NORTH EFFLUENT PIPELINES [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5636678	This cleanup verification package (CVP) documents completion of remedial action for the 100-B/C Effluent Pipeline subsites located north of B Avenue (100-B-8:2, 100-C-6:2, 100-C-6:3, and 100-C-6:4) (hereinafter collectively referred to as the 100-B/C north pipelines site). The 100-B/C north pipelines site is located within the 100-BC-1 Operable Unit of the 100-B/C Area. The 100-B/C Area is located near the Columbia River in the northwestern region of the Hanford Site. The 100-B/C north pipelines range from approximately 50 m (164 ft) to approximately 730 m (2,395 ft) from the Columbia River.	D, H		Y	A, M	NO	NO
CVP-2003-00009	Rev. 0	100-BC	100-BC-2	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 100-C-3 FRENCH DRAIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2696922	This cleanup verification package (CVP) documents completion of remedial action for the 100-C-3 French Drain (also referred to as the 100-C-3 site). The 100-C-3 site is located within the 100-BG-2 Operable Unit, east of the 105-C Reactor, in the 100-B/C Area of the Hanford Site in southeastern Washington State. The 100-C-3 French Drain was a 0.61-m (2-ft)-diameter gravel-filled pit that received effluent from the 119-C Sample Building. The 119-C Sample Building was built in 1960 and contained water-cooled air sample monitoring equipment. Effluent from the sampling equipment, the building's swamp cooler and possibly janitorial waste would have been disposed to the 100-C-3 French Drain.	D, H		Y	A, M	NO	NO

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CVP-99-00012	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-1 PROCESS EFFLUENT TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355511	The cleanup verification package for the 116-B-1 Process Effluent Trench (also known as the 107-B Liquid Waste Disposal Trench) documents the completion of cleanup activities at the site. The 116-B-1 Process Effluent Trench is hereinafter referred to as the 116-B-1 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00010	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-10 DRY WELL QUENCH TRAIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355882	The cleanup verification package for the 116-B-10 Dry Well/Quench Tank documents the completion of cleanup activities at the site. The 116-B-10 Dry Well/Quench Tank is hereinafter referred to as the 116-B-10 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00001	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-11 RETENTION BASIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8354878	The cleanup verification package for the 116-B-11 Retention Basin (also known as the 107-B Retention Basin) documents the completion of cleanup activities at the site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00008	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-12 SEAL PIT CRIB	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8848990	The cleanup verification package for the 116-B-12 Seal Pit Crib documents the completion of cleanup activities at the site. The 116-B-12 Seal Pit Crib is hereinafter referred to as the 116-B-12 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00002	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-13 SOUTH SLUDGE TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199158738	The cleanup verification package for the 116-B-13 South Sludge Trench (also known as the 107-B South Sludge Trench) documents the completion of cleanup activities at the site. The 116-B-13 South Sludge Trench is hereinafter referred to as the 116-B-13 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to adjacent grade elevations. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00003	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-14 NORTH SLUDGE TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199158739	The cleanup verification package for the 116-B-14 North Sludge Trench (also known as the 107-B North Sludge Trench) documents the completion of cleanup activities at the site. The 116-B-14 North Sludge Trench is hereinafter referred to as the 116-B-14 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to adjacent grade elevations. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00015	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-2 FUEL STORAGE BASIN TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355726	The cleanup verification package for the 116-B-2 Fuel Storage Basin Trench (also known as the B Storage Basin Crib and as the 105-B Storage Basin Trench) documents the completion of cleanup activities at the site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. All exposed surfaces have been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO

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CVP-99-00013	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-3 PLUTO CRIB	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355764	The cleanup verification package for the 116-B-3 Pluto Crib documents the completion of cleanup activities at the site. The 116-B-3 Pluto Crib is hereinafter referred to as the 116-B-3 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00014	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-4 FRENCH DRAIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355775	The cleanup verification package for the 116-B-4 French Drain (also known as the 105-B Dummy Decontamination French Drain or the 105-B Dummy Decontamination Disposal Crib) documents the completion of cleanup activities at the site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. Much of the site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-99-00011	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-6A CRIB AND 116-B-16 FUEL EXAMINATION TANK	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8373186	This cleanup verification package documents completion of remedial action for the 116-B-6A Crib and 116-B-16 Fuel Examination Tank (also referred to herein as the 116-B-6A/116-B-16 site). The 116-B-6A/116-B-16 site is located within the 100-BC-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. Because of their close proximity to each other and similar contaminants of concern (COCs), the two sites were excavated as one remedial action site.	D, H		Y	A, M	NO	NO
CVP-99-00017	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-6B CRIB	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355810	The cleanup verification package for the 116-B-6B Crib (also known as the 111-B Crib No. 2 and as 116-B-6-B-2) documents the completion of cleanup activities at the site. The 116-B-6B Crib is hereinafter referred to as the 116-B-6B site. The 116-B-6B site is located 9.2 m (30 ft) southeast of the location of the former 111-B Building in the 100 Area. The unlined crib received liquid wastes from the decontamination performed in the 111-B decontamination station, as well as liquid wastes from the decontamination of fuel element spacers. The crib received wastes from 1950 until its retirement in 1953. Upon decommissioning, the crib was covered with approximately 1.8 m (6 ft) of soil. Historical documents describe the site as an unfined crib partly or completely filled with coarse gravel.	D, H		Y	A, M	NO	NO
CVP-2002-00003	Rev. 0	100-BC	100-BC-1	2002	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-7 132-B-6 AND 132-C-2 BC OUTFALLS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D9147691	This cleanup verification package documents completion of remedial action for the 116-B-7, 132-B-6, and 132-C-2 B/C Outfalls (also referred to as the B/C Outfall sites). The B/C Outfall sites are located within the 100-BC-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. The three outfalls are north of the B/C Reactors along the terrace leading to the shoreline of the Columbia River. The outfall structures received reactor cooling water and process sewer effluent from reactor operations.	D, H		Y	A, M	NO	NO
CVP-99-00009	Rev. 0	100-BC	100-BC-1	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-B-9 FRENCH DRAIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8355822	The cleanup verification package for the 116-B-9 French Drain documents the completion of cleanup activities at the site. The 116-B-9 French Drain is hereinafter referred to as the 116-B-9 site. The 116-B-9 site is located within the 100-BC-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. Remedial action at this site was performed in accordance with remedial action objectives and goals established by the U.S. Environmental Protection Agency and the Washington State Department of Ecology, in concurrence with the U.S. Department of Energy, Richland Operations Office. The selected remedial action included (1) Excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed.	D, H		Y	A, M	NO	NO
CVP-98-00006	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-C-1 PROCESS EFFLUENT TRENCH	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199128695	The cleanup verification package for the 116-C-1 Process Effluent Trench (hereinafter referred to as the 116-C-1 site) documents the completion of cleanup activities at the site. The 116-C-1 site is located within the 100-BC-1 Operable Unit in the 100 Area of the Hanford Site in southeastern Washington State. Remedial action at this site was performed in accordance with remedial action objectives and goals established by the U.S. Environmental Protection Agency and the Washington State Department of Ecology, concurrence with the U.S. Department of Energy, Richland Operations Office. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility (ERDF) at the 200 Area of the Hanford Site, and (3) backfilling the site with clean soil to adjacent grade elevations. The excavation, disposal, and backfill activities have been completed, and the site has been revegetated.	D, H		Y	A, M	NO	NO
CVP-99-00019	Rev. 0	100-BC	100-BC-2	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-C-2A PLUTO CRIB 116-C-2B PUMP STATION 116-C-2C SAND FILTER AND OVER BURDEN SOILS FROM GROUP THREE SITES AT 100-BC AREA EXAMINATION TANK	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8373207	This cleanup verification package for the 116-C-2A Pluto Crib, 116-C-2B Pump Station, and 116-C-2C Sand Filter documents the completion of cleanup activities at these sites. For purposes of cleanup verification, the three separate sites were combined into a single cleanup verification area and are hereinafter referred to as the 116-C-2ABC site. The 116-C-2ABC site is located within the 100-BC-2 Operable Unit.	D, H		Y	A, M	NO	NO

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CVP-99-0004	Rev. 0	100-BC	100-BC-1	1999	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-C-5 RETENTION BASIN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8354930	The cleanup verification package for the 116-C-5 Retention Basin documents the completion of cleanup activities at the site. The 116-C-5 Retention Basin is hereinafter referred to as the 116-C-5 site. The selected remedial action included (1) excavating the site to the extent required to meet specified soil cleanup levels, (2) disposing of contaminated excavation materials at the Environmental Restoration Disposal Facility at the 200 Areas of the Hanford Site, and (3) backfilling the site with clean soil to average adjacent grade elevation. The excavation and disposal activities have been completed. The site is currently an open excavation with sloping walls. The exposed surfaces have all been sampled and analyzed. The site will be backfilled in the near future.	D, H		Y	A, M	NO	NO
CVP-2000-00010	Rev. 0	100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	2001	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-D-1A 116-D-1B STORAGE BASIN TRENCHES AND 100-D-46 BURIAL GROUND	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8686320	This cleanup verification package documents completion of remedial action for the 116-D-1A/116-D-1B Storage Basin Trenches and 100-D-46 Burial Ground (referred to as the 116-D-1A/116-D-16 site). The 116-D-1A/116-D-1B site is located within the 100-DR-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. The 116-D-1A site is a trench located approximately 30 m (100 ft) east of the 105-D Reactor Building. This trench was 40 m (130 ft) by 3 m (10 ft) by 1.8 m (6 ft) deep. It was used from 1947 to 1952 and received contaminated water and sludge from the 118-D Fuel Storage Basin.	D, H		Y	A, M	NO	NO
CVP-2000-00012	Rev. 0	100-BC	100-BC-1	2001	BHI	CLEANUP VERIFICATION PACKAGE FOR 116-D-9 CRIB AND PIPELINE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8686865	This cleanup verification package documents completion of remedial action for the 116-D-9 Crib and Pipeline (also referred to as the 117-D Seal Pit Crib). The 116-D-9 site is located within the 100-DR-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. The 116-D-9 Crib operated from 1960 to 1967 and received process effluent drainage through a 10-cm (4-in.-)diameter asbestos cement pipeline from the confinement system seal pits in the 117-D Building.	D, H		Y	A, M	NO	NO
CVP-2006-00002	Rev. 0	100-BC	100-BC-2	2006	WCH	CLEANUP VERIFICATION PACKAGE FOR 118-B-6 108-B SOLID WASTE BURIAL GROUND	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA03009218	This cleanup verification package documents completion of remedial action for the 118-B-6, 108-B Solid Waste Burial Ground (also referred to as the 118-B-6 site). The site consisted of two concrete pipes 5.5 m (18 ft) long by 1.8 m (6 ft) in diameter that were buried vertically in the ground. The two pipes were capped by a concrete pad measuring approximately 4.6 m (15 ft) by 3 m (10 ft) with two pear-shaped steel lids that provided access to the caissons. The site was located approximately 107 m (350 ft) northeast of the B Reactor. The site was used for the disposal of wastes from the "metal line" of the P-10 Tritium Separation Project. The site was active from 1950 through 1953.	D, H		Y	A, M	NO	NO
CVP-2006-00011	Rev. 0	100-BC	100-BC-2	2007	WCH	CLEANUP VERIFICATION PACKAGE FOR 118-C-1 105-C SOLID WASTE BURIAL GROUND [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA05508284	This cleanup verification package documents completion of remedial action for the 118-C-1, 105-C Solid Waste Burial Ground. The 118-C-1 site is located within the 100-BC-2 Operable Unit in the 100-BC Area of the Hanford Site in southeastern Washington State. This waste site was the primary burial ground for general wastes from the operation of the 105-C Reactor. The burial ground was in operation between 1953 and 1969 and received process tubes, aluminum fuel spacers, control rods, reactor hardware, spent nuclear fuel and soft wastes. The site was located approximately 150m (500ft) southeast of the 105-C Reactor.	D, H		Y	A, M	NO	NO
CVP-2004-00005	Rev. 0	100-BC	100-BC-2	2004	BHI	CLEANUP VERIFICATION PACKAGE FOR 118-C-2 BURIAL GROUND	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5936651	This cleanup verification package documents completion of remedial action for the 118-C-2 Ball Storage Tank Burial Ground (hereinafter referred to as the 118-C-2 Burial Ground site) and it's associated staging pile area. It was approximately 1,346 m (4,416 ft) from the Columbia River and 10 m (33 ft) north of the 105-C Reactor Building. The storage tank received irradiated nickel-plated boron-steel and carbon-steel balls from the 105-C Reactor during 1969. The balls were held in the tank for radiological decay before being transferred to a solid waste burial ground. The 118-C-2 Burial Ground site also includes an adjacent staging pile area that was used for sorting of debris removed from the burial ground prior to disposal at the Environmental Restoration Disposal Facility (ERDF). All waste has been removed from the staging pile area.	D, H		Y	A, M	NO	NO
CVP-2003-00015	Rev. 0	100-BC	100-BC-2	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 118-C-4 105-C HORIZONTAL CONTROL ROD CAVE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5613381	This cleanup verification package (CVP) documents completion of remedial action for the soil beneath the former 118-C-4 Horizontal Control Rod Cave (also referred to as the 118-C-4 site). The 118-C-4 waste site consists of the soils underlying the former 118-C-4, 105-C Horizontal Control Rod Cave (rod cave) building. The rod cave operated from 1950 to 1969 and was demolished as part of decontamination and decommissioning activities in March 2003. The structure consisted of two steel plate tunnels grouted onto a concrete floor and covered with 1.2 m (4 ft) of soil and gravel, as well as asphalt emulsion for moisture protection. The tunnels were used for temporary storage of radiologically contaminated horizontal control rod tips from the 105-C Reactor. Three French drains were located along the center of the structure floor for the removal of precipitation runoff that could potentially percolate and collect between the tunnels.	D, H		Y	A, M	NO	NO
CVP-2003-00005	Rev. 0	100-BC	100-BC-2	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-B8 SEPTIC TANK SYSTEM	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2696018	This cleanup verification package (CVP) documents completion of remedial action for the 1607-138 Septic Tank System (also referred to as the 1607-138 sites). The 1607-88 site is located east of the 190-C Process Pump House, approximately 120 m (394 ft) west of the 105-C Reactor in the 100-BC-2 Operable Unit of the 100-13/C Area of the Hanford Site in southeastern Washington State. The 1607-138 septic tank and associated tile field were used for disposal of sanitary sewer waste from the 190-C Pump house. The septic system received sanitary sewer waste from 1951 until 1969. The vertical tank was constructed of steel and had a 1,325-L (350-gal) capacity. The tile field was oriented in a north-south direction and was located to the south of the septic tank. The tile field was constructed of 20-cm (8-in.-)diameter vitrified clay pipe laid with open joints.	D, H		Y	A, M	NO	NO

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CVP-2003-00004	Rev. 0	100-BC	100-BC-2	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-B9 SEPTIC TANK SYSTEM	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2651846	This cleanup verification package (CVP) documents completion of remedial action for the 1607-137 Septic Tank System (also referred to as the 1607-137 Sanitary Sewer System or the 1607-67 sites). The 1607-137 site is located north of the former 183-B water treatment facility, about 400 m (1,300 ft) to the northwest of the B Reactor in the 100-B/C Area of the Hanford Site in southeastern Washington State. The site is a septic tank and drain field and was used for disposal of sanitary sewage from the 183-B water treatment facility from 1944 until 1969. The tank was constructed of reinforced concrete with a brick manhole access. The 12-person capacity septic tank was buried at a depth of 2.5 m (8 ft 3 in.). The drain field was constructed of 10-cm (4-in.) vitrified pipe, concrete pipe, or drain tile with a minimum of 2.4 m (8 ft) pipe length per capita. The pipe laterals were open-jointed and spaced about 2.4 m (8 ft) apart. The drain field was located due west of the septic tank.	D, H		Y	A, M	NO	NO
CVP-2003-00006	Rev. 0	100-BC	100-BC-2	2003	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-B9 SEPTIC TANK SYSTEM	http://www5.hanford.gov/arpir/?content=indpage&AKey=D5627950	This cleanup verification package (CVP) documents completion of remedial action for the 1607-89 Septic Tank System (also referred to as the 1607-B9 site). The 1607-89 site is located approximately 180 m (690 ft) to the southeast of the 105-C Reactor building in the 100-BC-2 Operable Unit in the 100-B/C Area of the Hanford Site in southeastern Washington State. The 1607-89 site is a septic tank and tile field that were used to dispose of sanitary sewer waste from the 105-C Reactor building. The tank had a 9,085-L (2,400-gal) capacity. The tile field located southeast of the tank was constructed of 20-cm (8-in.)-diameter vitrified day pipe. The 20-cm (8-in.)-diameter pipeline between the reactor building and the septic tank is part of the 100-C-9 pipelines site. Only a small portion of the pipeline was removed with the 1607-139 site. The remainder of the septic tank influent pipeline will be dispositioned with other pipelines included in the 900-C-9 pipelines site.	D, H		Y	A, M	NO	NO
CVP-2000-00024	Rev. 0	100-BC	100-BC-1, 100-DR-1, 100-HR-1,	2001	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-H2 SEPTIC SYSTEM	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8650014	This cleanup verification package documents completion of remedial action for the 1607-H2 Septic System (also referred to as the 1607-112 site). The 1607-112 site is located within the 100-HR-1 Operable Unit in the 100 Areas of the Hanford Site in southeastern Washington State. The site has also been known as the 124-H-2 sanitary sewer system. The site is located north of the 105-H Reactor Building in an area, prior to World War II and the formation of the Hanford Site, was occupied by fruit tree orchards. The 1607-1-12 Septic System was used from 1949 until 1965, receiving sanitary waste from the 182-H, 183-H, 190-H, and other 100-H Area office and maintenance buildings. The 1607-1-12 site consisted of a septic tank, drainfield, and associated piping.	D, H		Y	A, M	NO	NO
CVP-98-00009	Rev. 0	100-BC	100-BC-2	2000	BHI	CLEANUP VERIFICATION PACKAGE FOR 105-C REACTOR BUILDING BELOW GRADE STRUCTURES AND UNDERLYING SOILS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8444938	The cleanup verification package for the 105-C Reactor Building presents the results of remedial action verification surveys/sampling performed at the 105-C Reactor Building below-grade structures and underlying soils in support of the 105-C Reactor Interim Safe Storage Project. Remedial action at this site has been performed in accordance with remedial action objectives and goals established by the U.S. Environmental Protection Agency in concurrence with the U.S. Department of Energy, Richland Operations Office. The selected remedial action was (1) removal of radioactively contaminated structures and equipment and hazardous materials, (2) disposal of contaminated materials at the Environmental Restoration and Disposal Facility (located in the 200 Area of the Hanford Site), and (3) backfill of the below-grade areas with clean soil to adjacent grade elevations.	D, H		Y	A, M	NO	NO
D8453142		100-BC, 100-DR, 100-HR, 100KR, 100- FR	100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2	2000	EPA, DOE/RL, Ecology, C.E. Findley, K. Klein, M.A. Wilson	DECLARATION OF RECORD OF DECISION FOR 100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-2 100-HR-2 100-KR-2 100 AREA BURIAL GROUNDS HANFORD SITE BENTON COUNTY WASHINGTON	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8453142	This decision document presents the selected interim remedial actions for portions of the U.S. Department of Energy (DOE) Hanford 100 Area (100 Area Burial Grounds), Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record for this site and for the specific operable units. The response action selected in this Interim Action Record of Decision (ROD) is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. Such a release or threat of release may present an imminent and substantial endangerment to public health, welfare, or the environment.	D, H	G, Z, E	M	NO	Yes	
D195066674		100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	1995	EPA, DOE/RL, Ecology, C. Clarke, J.D. Wagoner, M.A. Wilson	DECLARATION OF RECORD OF DECISION FOR 100-BC-1 100-DR-1 AND 100-HR-1 OU USDOE HANFORD 100 AREA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195066674	This decision document presents the selected interim remedial actions for portions of the USDOE Hanford 100 Area, Hanford Site, Benton County, Washington, which were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Specifically the selected remedial actions will address 37 high priority waste sites that received liquid radioactive effluent discharges in the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units, as well as adjacent contaminated sites that are within the area required for remediation. This decision is based on the Administrative Record for this site and for the specific Operable Units.	D, H	G, Z, E	M	NO	Yes	

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WHC-EP-0087		100-BC, 100-FR	100-BC-1, 100-BC-5, 100-FR-1	1987	WHC, R.K. Wahlen, R.L. Miller	ESTIMATES OF SOLID WASTE BURIED IN 100 AREA BURIAL GROUNDS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196008314	The information in this report is designed to support future decommissioning plans, to provide information for assessing compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program, and to update the Hanford Site Waste Inventory Data System. Mercury was used in manometers and other instruments in the 100 Areas. Since these instruments were broken occasionally, it is a good assumption that mercury was either buried or drained to a crib or trench in the area. However, it is expected that the amount of mercury would be no more than found in any other industrial plant and is not addressed further in this report. Mercury used in the tritium separation process performed in 100 B/C Area is included in Section 5.1 of this document.	D, H				NO	NO
WHC-EP-0439		100-BC	100-BC-1	1991	WHC	FACILITY EFFLUENT MONITORING PLAN DETERMINATIONS FOR 100 AREA FACILITIES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196078648	This report evaluates the gaseous and liquid effluent emissions from N Reactor and determines the potential annual radiation exposure to the maximally exposed individual offsite; this will determine the need for Facility Effluent Monitoring Plan (FEMP). This evaluation will determine the degree to which Westinghouse Hanford Company (Westinghouse Hanford) must monitor N Reactor airborne emissions and liquid effluents. A FEMP will be developed for the normal shutdown condition for N Reactor, as required by U.S. Department of Energy (DOE) Orders 5400.1 (DOE 1988a), 5400.3 (DOE 1989a), 5400.4 (DOE 1989b), 5400.5 (DOE 1990), 5480.1 (DOE 1982), 5480.11 (DOE 1988b), and 5484.1 (DOE 1981), and U.S. Environmental Protection Agency (EPA) regulations in 40 Code of Federal Regulations (CFR) 61 (EPA 1989a).	D		Y, X		NO	NO
0100X-IG-G0001	Rev. 1	100-BC, 100-DR, 100-HR	100-BC-1, 100-DR-1, 100-HR-1	1996	BHI, W.S. Thompson	FIELD INSTRUCTION GUIDE FOR REMEDIATION OF 100-BC- 1 100-DR-1 100-HR-1 WASTE SITES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199021855	This Field Instruction Guide (FIG) provides direction to field analytical personnel for implementing the 100-BC-1, 100-DR-1, and 100-HR-1 Sampling and Analysis Plan (SAP) (DOE-RL 1996). The SAP is the controlling document in performing work. All references to the SAP are italicized to distinguish SAP references from FIG references. This FIG will be revised as field conditions dictate or when upper-tier requirements in the SAP are changed. The FIG is issued and controlled as an instruction guide. All revisions to the FIG will be approved by the Resident Engineer using a Design Change Notice (DCN). The Resident Engineer for each of the remediation projects covered by the SAP will provide direction as needed, as described in this guide. A Sample Authorization Form (SAF) will be prepared for each remedial action activity that provides analytical parameters, analytical methods, sample container type and volume, and holding time for each laboratory (Standard Fixed Laboratory [SFL], Quick Turnaround Laboratory [QTL]).	D				NO	NO
WHC-EP-0448		100-BC	100-BC-1, 100-BC-2, 100-BC-3, 100-BC-4, 100-BC-5	1992	WHC, D.S. Landeen, M.R. Sackschewsky	FY 1991 100 AREAS CERCLA ECOLOGICAL INVESTIGATIONS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196133899	The ecological investigations conducted during 1991 at 100-HR-3 and 100-BC-5 operable units associated with 100- H, D, OR, B, and C reactors were composed of the following subtasks: (1) data compilation, (2) preliminary ecological investigations report, (3) field activities, (4) laboratory analysis, and (5) data evaluation. This report summarizes the status of the field work, the terrestrial field investigations, performed under subtask 3. When all the subtasks have been completed a final report will summarize the results of the ecological field investigations. The following sections provide details on the terrestrial field methodologies and a summary of the data collected to date by Westinghouse Hanford.			E		NO	NO
PNL-8143		100-BC	100-BC-1, 100-BC-2, 100-BC-3, 100-BC-4, 100-BC-5	1992	PNL, J.C. Chatters	FY 1991 REPORT ON ARCHAEOLOGICAL SURVEYS OF 100 AREAS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196109574	In compliance with Section 106 of the National Historic Preservation Act (NHPA), and at the request of Westinghouse Hanford Company, the Hanford Cultural Resources Laboratory (HCRL) conducted an archaeological survey during FY 1991 of the 100-Area reactor compounds on the US Department of Energy's Hanford Site. This survey was conducted as part of a comprehensive resources review of 100-Area Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) operable units in support of CERCLA characterization activities. The work included a light and records review and pedestrian survey of the project area following procedures set forth in the Hanford Cultural Resources Management Plan.	D		T		NO	NO
PNL-8819		100-BC	100-BC-1	1993	MK WRIGHT, PNL	FY 1992 REPORT ON ARCHAEOLOGICAL SURVEYS OF 100 AREAS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196111839	The project area for FY 1992 included three areas: 1) the portion of the Hanford Site designated as the 100-HR-3 Operable Unit, which includes lands outside the 100-DR-1, 100-DR-2, 100-DR-3, 100-IU-4, 100-HR-1, and 100-HR-2 operable units, 2) archaeological test excavations at sites 45BN432 and 45BN433 near the 100-F Reactor, and 3) archaeological test excavations at site 45BN423 near the 100-K Reactor.	D, H				NO	NO
PNNL-13698		100-BC	100-BC-5	2001	MJ HARTMAN, PNNL	FY 2002 INTEGRATED MONITORING PLAN FOR HANFORD GROUNDWATER MONITORING PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D1661244	This document is an integrated monitoring plan for the groundwater project and contains well and constituent lists for monitoring required by the Atomic Energy Act of 1954 and its implementing orders ("surveillance monitoring"); other, established monitoring plans by reference; and a master well/ constituent/frequency matrix for the entire Hanford Site.	D, H		Y, X	M	NO	NO
PNNL-14111		100-BC, 100-FR, 100- HR, 100- KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	2002	PNNL, M.J. Hartman	FY 2003 INTEGRATED MONITORING PLAN FOR HANFORD GROUNDWATER MONITORING PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D9192290	This document is an integrated monitoring plan for the Groundwater Monitoring Project. It documents well and constituent lists for the monitoring required by the Atomic Energy Act of 1954 and its implementing orders.	D, H		Y, X	M	NO	NO
PNNL-15176		100-BC, 100-FR, 100- HR, 100- KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	2005	PNNL, J.T. Rieger, M.J. Hartman	FY 2005 INTEGRATED MONITORING PLAN FOR HANFORD GROUNDWATER PERFORMANCE ASSESSMENT PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA273110	Groundwater is monitored in hundreds of wells at the Hanford Site to fulfill a variety of requirements. Separate monitoring plans are prepared for various purposes, but sampling is coordinated and data are shared among users. DOE manages these activities through the Hanford Groundwater Performance Assessment Project, which is the responsibility of Pacific Northwest National Laboratory. The groundwater project integrates monitoring for various objectives into a single sampling schedule to avoid redundancy of effort and to improve efficiency of sample collection. This report documents the purposes and objectives of groundwater monitoring at the DOE Hanford Site in southeastern Washington State.			Y		NO	NO

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PNL-6728		100-BC, 100-DR, 100-HR, 100-KR	100-BC-1, 100-BC-5, 100-DR-1, 100-HR-3, 100-KR-1	1988	PNL, T.L. Liikala	GEOHYDROLOGIC CHARACTERIZATION OF AREA SURROUNDING 183-H SOLAR EVAPORATION BASINS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195063972	An assessment-level compliance monitoring project was established for the 183-H Basins because hazardous waste constituents were known to have entered the ground water beneath the facility. Three phases were defined for this project with work being concentrated in five areas: geology, hydrology, ground-water monitoring, geochemistry, and ground-water modeling. These characterization activities have resulted in the definition of CN, principal lithologic and hydrostratigraphic units. Ground-water monitoring results indicated a contamination peak, which occurred between April and August 1986. Further monitoring has shown that nitrate, sodium, gross alpha, and gross beta are the clearest indicators of ground-water contamination attributable to the 183-H Basins. In addition, the concentrations of these contaminants are affected by variations in Columbia River stage. Future studies will focus on continued ground-water monitoring throughout the closure and post-closure periods for the 183-H Basins, sampling of the Columbia River and nearby ground-water springs, and soil sampling adjacent to the facility.	D, H	G, Z, C	Y, P		NO	NO
SGW-44022	Rev. 0	100-BC	100-BC-5	2010	CH2MHILL	GEOHYDROLOGIC DATA PACKAGE IN SUPPORT OF 100- BC-5 MODELING	http://www5.hanford.gov/arpir/?content=indpage&AKey=1003100446	At the 100-B/C Area, liquid and solid wastes from reactor operations and associated facilities were released to the soil column and the Columbia River. The sources of the contamination include liquid waste sites, burial grounds, unplanned release sites, facilities/structures, and pipelines/outfalls.	P	G, Z	S, X		NO	NO
RHO-BWI-ST-4		100-BC	100-BC-1	1979	ROCKWELL HANFORD OPERATIONS	GEOLOGIC STUDIES OF COLUMBIA PLATEAU STATUS REPORT OCTOBER 1979 [SECTION 1 OF 11]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196002105	The overall objective of the geologic studies has been to provide geologic information necessary to identify areas beneath the Hanford Site that have a high probability of containing basaltic rock suitable for a nuclear waste repository. Geologic investigations have included reconnaissance studies, studies within a large region representing much of the outcrop extent of the Columbia River basalt, and detailed studies within the Pasco Basin where the Hanford Site is located. Both regional and Pasco Basin studies have emphasized those aspects of the lithology, stratigraphy, structure, and tectonic stability of the Columbia River Basalt Group that relate to geologic considerations for repository site selection and evaluation within the Hanford Site.		G			NO	NO
SD-EN-TI-133	Rev. 0	100-BC	100-BC-1, 100-BC-2, 100-BC-5	1993	WHC, J.W. Lindberg	GEOLOGY OF 100-BC AREA SOUTH-CENTRAL WASHINGTON	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196134620	The purpose of this report is to discuss the geologic setting of the 100-B/C Area. This discussion is based on data acquired during recent drilling activities, data from older projects and boreholes from the area, and analysis of analogous geologic units from outcrops and boreholes located elsewhere in the region. The report is divided into two parts: (1) a brief review of the regional setting (taken largely from Lindsey and Jaeger 1993) and (2) detailed discussion of 100-B/C Area geology.		G			NO	NO
RHO-BWI-LD-5		100-BC, 100-HR, 100-NR	100-BC-1, 100-BC-5, 100-HR-3, 100-NR-1	1978	RHO, K.R. Fecht	GEOLOGY OF GABLE MOUNTAIN GABLE BUTTE AREA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196044987	The study of Gable Mountain and Gable Butte described in this report had the following objectives: 1) Map and describe the rock units and geologic structures exposed on Gable Mountain and Gable Butte and project these structural and stratigraphic features into the adjacent subsurface using available borehole data as control for projections. 2) Map and describe the fluvial sediments that surround Gable Mountain and Gable Butte. 3) Evaluate the west end of Gable Mountain for use as a near-surface test facility; the near-surface test facility is an underground test facility being constructed on the west end of Gable Mountain to test the thermal and mechanical response of basalt rock to electric heater and spent fuel loadings; geologic studies specifically for the siting of this facility are being finalized. 4) Make preliminary geologic interpretation based on the above studies of the geologic features of the Gable Mountain-Gable Butte area as they relate to basalt repository siting considerations in the Pasco Basin.		G			NO	NO
SD-EN-TI-204	Rev. 0	100-BC, 100-DR	100-BC-1, 100-BC-2, 100-BC-5, 100-DR-1, 100-DR-2	1994	WHC, K.A. Bergstrom	GROUND PENETRATING RADAR INVESTIGATION CONDUCTED IN 100 AREAS HANFORD SITES FY 1992	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196061851	During Fiscal Year 1992, the Geophysics Group conducted forty-five Ground-Penetrating Radar (GPR) surveys in the 100 Areas (Figure 1). Objectives for the investigations varied, from locating cribs, trenches and septic systems to helping site boreholes. The results of each investigation were delivered to clients in the form of a map that summarized the interpretation of a given site. No formal reports were prepared. The purpose of this document is to show where and why each of the surveys was conducted. The data and interpretation of each survey are available by contacting the Westinghouse Hanford Company, Geophysics Group. A map showing the location and basic parameters of each survey can be found in the Appendices of this report.	D				NO	NO
WHC-EP-0394-1		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1990	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196038135	This report presents the results of the June 1990, ground water level measurement program at the 100 Areas and 200 Areas of the Hanford Site (Figure 1). The water levels beneath these areas are measured regularly on a semiannual basis and the data received are used to produce the following set of maps for public release. For clarity, the locating prefixes have been omitted from all well numbers shown on the maps. Wells in the 100 Areas have the prefix 199; wells in the 200 Areas have the prefix 299, and the wells outside these areas have the prefix 699. Ground Water Maps of the Hanford Site is prepared by the Geosciences Group, Environmental Division, Westinghouse Hanford Company, for the US Department of Energy, Richland Operations Office. 1 ref., 6 figs., 2 tabs.	D	G,Z			NO	NO
WHC-EP-0394-2		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1991	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1990	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196068114	This report presents the December 1990 ground water level measurement data for the 100 Areas, 200 Areas, and the 300-1100 areas of the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-4		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1992	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1991	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196096999	This report presents the December 1991 water level data for the unconfined aquifer beneath the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-6		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1993	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1992	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196097003	This report presents water level data collected mainly during December 1992.	D	G,Z			NO	NO

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WHC-EP-0394-8		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1994	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1993	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196074919	This series presents the latest results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. These reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-10		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1995	WHC, J.A. Serkowski	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1994	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196006896	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-12		100-BC	100-BC-5	1996	WHC	GROUNDWATER MAPS OF HANFORD SITE DECEMBER 1995	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196147555	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-3		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1991	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE JUNE 1991	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196083619	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-5		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1992	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE JUNE 1992	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196119699	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-7		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1994	WHC, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE JUNE 1993	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196096952	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-9		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1994	WHC, J.A. Serkowski	GROUNDWATER MAPS OF HANFORD SITE JUNE 1994	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196041820	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0394-11		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1996	WHC, J.A. Serkowski	GROUNDWATER MAPS OF HANFORD SITE JUNE 1995	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196083665	This series presents the results of the semiannual water level measurement program and the water table maps generated from these measurements. The reports document the changes in the groundwater level at the Hanford Site during the transition from nuclear material production to environmental restoration and remediation. In addition, these reports provide water level data to support the various site characterization and groundwater monitoring programs currently in progress on the Hanford Site.	D	G,Z			NO	NO
WHC-EP-0142-2		100-BC, 100-HR, 100-KR, 200-BP, 300 FF	100-BC-5, 100-HR-3, 100-KR-4, 200-BP-1, 300-FF-5	1989	WHC, A.L. Schatz, G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE SEPARATIONS AREA JANUARY 1989	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195062758	This set of groundwater maps consists of: (1) Separations Area depth to water map, (2) Separations Area water table map, and (3) a map comparing the potentiometric surface of the Rattlesnake Ridge confined aquifer with the water table of the unconfined aquifer. The field measurements for these maps were collected during the period January 19 to February 8, 1989, and are listed in Table 1. For clarity, the locating prefixes have been omitted from all well numbers shown on the maps. Wells in the 200 Areas have the prefix 299, and the wells outside of these areas have the prefix 699.	D	G,Z			NO	NO
WHC-EP-0142-1		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1988	WHC, A.L. Schatz, M.D. McElroy	GROUNDWATER MAPS OF HANFORD SITE SEPARATIONS AREA JUNE 1988	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196007062	The Separations Area water-table map is prepared semiannually from water-level measurements made in June and December. For the June 1988 map, approximately 190 wells were used for contouring the water table. The water table mound beneath the deactivated U-Pond continues to decrease in size. This reflects the impact of shutting off flow to the pond in the fall of 1984. During the period from December 1987 to June 1988, the mound decreased slightly. This mound has had an overall decline of approximately 8 ft since 1984. The water-table map also shows the locations of wells where the June 1988 measurements were made, and the data for these measurements are listed in Table 1.	D	G,Z			NO	NO
WHC-EP-0142-3		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1989	G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE SEPARATIONS AREA JUNE 1989	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195066317	The groundwater maps of the Hanford Site Separations Area, recorded June 1989, are prepared by the Environmental Engineering and Technology Function, Environmental Division, Westinghouse Hanford Company. The groundwater maps are updated on a semiannual basis and are complementary to the Hanford Site water table map prepared by Pacific Northwest Laboratory. This set of groundwater maps consists of: (1) Separations Area depth to water map, (2) Separations Area water table map, and (3) a map comparing the potentiometric surface of the Rattlesnake Ridge confined aquifer with the water table of the unconfined aquifer.	D	G,Z			NO	NO

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WHC-EP-0142-4		100-BC	100-BC-5	1990	G.L. Kasza	GROUNDWATER MAPS OF HANFORD SITE SEPARATIONS AREAS DECEMBER 1989	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196020192	The groundwater maps of the Hanford Site Separations Areas are prepared by the Environmental Engineering and technology Function Environmental Division, Westinghouse Hanford Company. The groundwater maps are updated on a semiannual basis and are complementary to the Hanford Site water table map prepared by Pacific Northwest Laboratory. This set of groundwater maps consists of: (1) Separations Area depth to water map, (2) Separations Area water table map, and (3) a map comparing the potentiometric surface of the Rattlesnake Ridge confined aquifer with the water table of the unconfined aquifer. The field measurements for these C3 maps were collected during June 1989, and are listed in Table 1. For clarity, the locating prefixes have been omitted from all well numbers shown on the maps. Wells in the 200 Areas have the prefix 299, and the wells 10 outside of these areas have the prefix 699.	D	G,Z			NO	NO
PNL-5408		100-BC	100-BC-1	1985	PNL	GROUNDWATER MONITORING AT HANFORD SITE JANUARY DECEMBER 1984	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196044949	This comprehensive program is designed to evaluate existing and potential pathways of exposure to radioactivity and hazardous chemicals from site operations. The objectives of the ground-water monitoring portion of this program are as follows: 1) measure and report the concentration and distribution of radioactive and other chemical constituents in the ground water, 2) determine the movement and transport of constituents with time, and 3) evaluate the impact of groundwater contamination on people and their environment. To achieve the objectives the ground-water samples are collected and analyzed and the results are then interpreted through the program technical studies are performed that provide additional information on the ground-water system and on the behavior of constituents within the system.	D	G, Z		A	NO	NO
57631		100-BC, 100-FR, 100- HR, 100- KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	1998	DOE/RL, M.J. Furman	GROUNDWATER MONITORING PLANS FOR LOW-LEVEL BURIAL GROUNDS AND LERF	http://www5.hanford.gov/arpir/?content=indpage&AKey=D198132581	This report presents the final status groundwater monitoring plan for the Hanford Site Low-Level Burial Grounds. The three major purposes of this document are to: Define the final status groundwater monitoring networks for the four operational LLWMAs (one LLWMA has not been used as of this date), Select constituents and parameters that will be used to determine if a release has occurred from a LLWMA, and Present the statistical method used to evaluate the impact of each LLWMA on the groundwater.	D	G, Z		A	NO	NO
PNNL-13326		100-BC	100-BC-5	2000	PNNL, M.D. Sweeney	GROUNDWATER SAMPLING AND ANALYSIS PLAN FOR 100-BC-5 OU	http://www5.hanford.gov/arpir/?content=indpage&AKey=D1660009	This plan includes the sampling, analysis, and quality assurance requirements for the 100-BC-5 Operable Unit on the USDOE Hanford Site.		Z			NO	NO
UNI-2533		100-BC	100-BC-1	1900	UNC	HANFORD 100 AREA LONG RANGE DECOMMISSIONING PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196015388	The purpose of this Long-Range Plan is to describe the basic strategies and provide baseline cost estimates and schedules for decommissioning the Hanford 100 Area shut-down facilities. The strategies and priorities presented in this Plan are based on engineering studies and experience gained from previous 100 Area decommissioning work. Specifically, this plan: <ul style="list-style-type: none">• Describes the facilities' physical and radiological conditions;• Provides conceptual cost estimates and schedules;• Describes the decommissioning management plan;• Describes the recommended preferred decommissioning alternative;• Groups the facilities into manageable projects and prioritizes those projects; and• Identifies special problems, R&D requirements, required equipment, and potentially reusable facilities and equipment.	D,H,P	G,Z	Y, X		NO	Yes
BHI-01282	Rev. 0	100-BC	100-BC-1	1999	BHI, P.W. Griffin	HANFORD B-REACTOR BUILDING HAZARD ASSESSMENT REPORT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199158564	The assessment included a review of previously published documents for hazard/risk identification at the B Reactor building and walk-throughs with an assessment team of Professionals to confirm the current status of facility's hazards. This report will be submitted to RL and U. S. Environmental Protection Agency (EPA) and documents the hazards, determine the feasibility of mitigating the hazards, and makes recommendations on locations where public access should not be permitted. Figure 1 contains a map of the layout of the floor plan for the B Reactor building. Figure 2 contains a floor plan of the existing and additional tour routes for the reactor building.	D, H				NO	NO
PNL-6942		100-BC	100-BC-1	1989	PNL	HANFORD CULTURAL RESOURCES MANAGEMENT PLAN	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196044966	As a federal agency, the US Department of Energy (DOE) has been directed by Congress and the President to provide leadership in the preservation of prehistoric, historical, and cultural resources on lands it administers, to manage these in a spirit of stewardship for future generations, and to protect and preserve the rights of Native American to religious freedom. The purpose of this document is to describe how the DOE-Richland Operations (DOE-RL) will meet those responsibilities on the Hanford Site, pursuant to guidelines for Agency Responsibilities under the Historic Preservation Act . This document is intended for multiple uses. Among other things, the text is designed as a manual for cultural resource managers to follow and as an explanation of the process of cultural resource regulatory compliance for the DOE-RL and Site contractors.	D,P	G,Z,E,T			YES	NO
PNL-3777		100-BC	100-BC-5	1900	WD MCCORMACK, PNNL	HANFORD DOSE OVERVIEW PROGRAM STANDARDIZED METHODS AND DATA FOR HANFORD ENVIRONMENTAL DOSE CALCULATIONS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195063319	This document serves as a guide to Hanford contractors for obtaining or performing Hanford-related environmental dose calculations. Because environmental dose estimation techniques are state-of-the-art and are continually evolving, the data and standard methods presented herein will require periodic revision. This document is scheduled to be updated annually, but actual changes to the program will be made more frequently if required. For this reason, PNL's Occupational and Environmental Protection Department should be contacted before any Hanford-related environmental dose calculation is performed. This revision of the Hanford Dose Overview Program Reports primarily reflects changes made to the data and models used in calculating atmospheric dispersion of airborne effluents at Hanford. The modified data and models are described in detail in the sections on atmospheric dispersion data and in Appendix B. In addition, discussions of dose calculation methods and the review of calculation results have been.	D,P		Y,X		NO	NO

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WHC-EP-0458		100-BC	100-BC-5	1992	WHC	HANFORD GROUNDWATER CLEANUP AND RESTORATION CONCEPTUAL STUDY	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196118560	The Hanford Site Cleanup and Restoration Conceptual Study is an investigation of the feasibility of characterization, cleanup, and restoration of the Hanford Site on a large-scale basis rather than the current approach of remediation according to groups of individual waste sites (called operable units). The purpose of the site wide groundwater restoration study is to (1) develop groundwater use scenarios, (2) identify potential groundwater restoration technologies that may be appropriate at the Hanford Site, (3) recommend site wide engineering systems that satisfy the restoration objectives for each groundwater-use scenario, and (4) identify emerging technologies or research and development (R&D) needs that have potential at the Hanford Site.		G, Z, T	Y		NO	Yes
PNL-6509		100-BC	100-BC-1	1988	PNNL	HANFORD METEOROLOGICAL DATA COLLECTION SYSTEM AND DATA BASE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196044961	This report describes the contents, implementation, and location of the current data base and the future data base at the HMS. The history of the data collection system at the HMS and a current inventory of measured variables are also addressed, and plans for future archival and retrieval programs are identified. Detailed discussions of the data entry codes used for archival have been presented previously (Buck and Andrews 1987a, b, c; Andrews and Buck 1987a, b, c). Discussions in this report consider only the meteorological data collected and archived by the HMS; a forthcoming PNL report will discuss and describe the data collection system in more detail.	D	C	Y		NO	NO
PNNL-14687		100-BC, 100-FR, 100- HR, 100-KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	2004	PNNL, L.F. Morasch, R.L. Dirkes, R.W. Hanf, T.M. Poston	HANFORD SITE ENVIRONMENTAL REPORT FOR CY 2003 (SECTION 1 OF 2)	http://www5.hanford.gov/arpir/?content=indpage&AKey=D6396066	This report is published each year by DOE to summarize environmental data and information, describe environmental management performance, demonstrate the status of compliance with environmental regulations, and highlight major environmental programs and efforts.	D,H,P	G,Z,C,E,T	Y,S,X	A	YES	YES
WHC-EP-0212-I		100-BC	100-BC	1990	WHC, R.P. Anantamkula	HANFORD SITE ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT TECHNOLOGY PLAN CY 1990	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196015720	The Hanford Site Environmental Restoration and Waste Management Technology Plan provides a description of the technology required to implement waste disposal and inactive site cleanup as dictated by environmental requirements. The Hanford Site Environmental Restoration and Waste Management Technology Plan is composed of sections that address the technology requirements related to eight different functional and waste categories. Each category includes descriptions of related technical issues and the tasks that must be performed to resolve them. Summary projections of cost and schedule for resolution of pertinent technical issues are included within each functional or waste category and within an overall cost summary action. The document is compiled from reports authored by individual directly involved in the planning and implementation of technology development activities related to the various technical issues. The Hanford Site Environmental Restoration and Waste Management Technology Plan is revised periodically.	D,P				YES	Yes
PNNL-14295		100-BC	100-BC-5	2003	TM POSTON, PNNL	HANFORD SITE ENVIRONMENTAL SURVEILLANCE DATA REPORT FOR CY 2002	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2981349	This report is prepared annually to satisfy the requirements of DOE Orders. The report provides an overview of activities at the Hanford Site during 2002 and demonstrates the site's compliance with applicable federal, state, and local environmental laws, regulations, executive orders, and DOE policies; and to summarize environmental data that characterize Hanford Site environmental management performance. The purpose of the report is to provide useful summary information to members of the public, public officials, regulators, Hanford contractors, and elected representatives.	D,H,P	G,Z,C,E,T	Y,S,X	A	YES	YES
PNL-8073		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1992	PNL, J.C. Evans	HANFORD SITE GROUNDWATER MONITORING FOR 1990	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196103572	The Pacific Northwest Laboratory monitors ground-water quality across the Hanford Site for the US Department of Energy (DOE) to assess the impact of Site operations on the environment. Monitoring activities were conducted to determine the distribution of mobile radionuclides and identify chemicals present in ground water as a result of Site operations and whenever possible, relate the distribution of these constituents to Site operations. To comply with the Resource Conservation and Recovery Act, additional monitoring was conducted at individual waste sites by the Site Operating Contractor, Westinghouse Hanford Company (WHC), to assess the impact that specific facilities have had on ground-water quality. Six hundred and twenty-nine wells were sampled during 1990 by all Hanford ground-water monitoring activities.			Y		NO	NO
PNNL-11470		100-BC	100-BC-5	1997	MJ HARTMAN, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR FY 1996	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199132964	This report summarizes the results of fiscal year (FY) 1996 groundwater- and vadose-zone monitoring activities on Hanford Site. This report is designed to provide a comprehensive, current interpretation of groundwater conditions on the site and in adjacent areas, including a description of site hydrogeology, groundwater flow, and groundwater contaminant distribution. This report fulfills reporting requirements of the Resource Conservation and Recovery Act of 1976 (RCRA), Ground-Water Surveillance, Solid Waste Landfill, applicable U.S. Department of Energy (DOE) orders, and Operational Monitoring Programs and summarizes results of groundwater monitoring conducted to assess the effects of remediation or interim measures conducted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).			Y		NO	NO
PNNL-11793		100-BC	100-BC-5	1998	MJ HARTMAN, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR FY 1997	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199132962	This report summarizes the results of fiscal year (FY) 1997 groundwater- and vadose-zone monitoring activities on the Hanford Site. This report is designed to provide a comprehensive, current interpretation of groundwater conditions on the site and in adjacent areas, including a description of site hydrogeology, groundwater flow, and groundwater contaminant distribution. This report fulfills reporting requirements of the Resource Conservation and Recovery Act of 1976 (RCRA), other Washington Administrative Codes, and the Atomic Energy Act of 1954 as implemented by U.S. Department of Energy (DOE) orders. This report also summarizes results of groundwater monitoring conducted to assess the effects of remediation or interim measures conducted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).			Y		NO	NO

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PNNL-12086		100-BC	100-BC-5	1999	MJ HARTMAN, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR FY 1998	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199091099	This report presents the results of groundwater and vadose-zone monitoring and remediation for fiscal year (FY) 1998 on the Hanford Site, Washington. This report summarizes the results of fiscal year (FY) 1998 groundwater and vadose-zone monitoring and remediation activities on the Hanford Site. This report is designed to provide a comprehensive interpretation of current groundwater conditions on the site and in adjacent areas, including a description of site hydrogeology, groundwater flow, and groundwater-contaminant distribution. This report fulfills reporting requirements of the Resource Conservation and Recovery Act of 1976 (RCRA), specific Washington Administrative Codes, and the Atomic Energy Act of 1954 as implemented by U.S. Department of Energy (DOE) orders. This report also summarizes results of groundwater monitoring conducted to assess the effects of remediation or interim measures conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).			Y		NO	NO
PNNL-13116		100-BC, 100-FR, 100- HR, 100- KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	2000	PNNL, L.F. Morasch, M.J. Hartman, W.D. Webber	HANFORD SITE GROUNDWATER MONITORING FOR FY 1999 [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2736610	This report presents the results of groundwater and vadose zone monitoring and remediation for fiscal year 1999 on the U.S. Department of Energy's Hanford Site, Washington. Water-level monitoring was performed to evaluate groundwater flow directions, to track changes in water levels, and to relate such changes to evolving disposal practices. Measurements for site-wide maps were conducted in June in past years and are now measured in March to reflect conditions that are closer to average.			Y		NO	NO
PNNL-13404		100-BC	100-BC-5	2001	PNNL, L.F. Morasch, M.J. Hartman, W.D. Webber	HANFORD SITE GROUNDWATER MONITORING FOR FY 2000 [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2743868	This report presents the results of groundwater and vadose zone monitoring and remediation for fiscal year 2000 on the U.S. Department of Energy's Hanford Site, Washington. The most extensive contaminant plumes are tritium, iodine-129, and nitrate, which all had multiple sources and are very mobile in groundwater. Carbon tetrachloride and associated organic constituents form a relatively large plume beneath the central part of the Site. Hexavalent chromium is present in smaller plumes beneath the reactor areas along the river and beneath the central part of the site. Strontium-90 exceeds standards beneath each of the reactor areas, and technetium-99 and uranium are present in the 200 Areas.			Y,P		NO	NO
PNNL-13788		100-BC	100-BC-5	2002	MJ HARTMAN, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR FY 2001 [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2737262	This report provides information on the status of groundwater monitoring at the Hanford Site during fiscal year 2001.			Y		NO	NO
PNNL-14187		100-BC	100-BC-5	2003	MJ HARTMAN, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR FY 2002 [SECTION 1 OF 2]	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2752375	This report presents the results of groundwater and vadose zone monitoring and remediation for fiscal year 2002 on the U.S. Department of Energy's Hanford Site in Washington State. This report is written to meet the requirements in CERCLA, RCRA, the Atomic Energy Act of 1954, and Washington State Administrative Code.			Y		NO	NO
PNL-6886		100-BC	100-BC-5	1989	JC EVANS, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR JANUARY THROUGH JUNE 1988	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196009091	This semiannual report provides brief discussions and detailed data listings of results for ground-water monitoring at the Hanford Site during January through June 1988. This report presents and discusses the water table elevation map (Plate 1, in back pocket) for the Hanford Site for June 1988 and results of ground-water sampling and analysis. The following contaminants are discussed in detail because of their high concentrations or widespread distribution: 1) carbon tetrachloride in 200-West Areas; 2) cyanide in and north of the 200-East and the 200-West Areas; 3) hexavalent chromium contamination in the 100-B, 100-D, 100-F, 100-H, 100-K, and the 200-West Areas; 4) chlorinated hydrocarbons in the vicinity of the Central Landfill and 300 Area; 5) uranium in the 100-F, 100-H, 200-West, and 300 Areas; 6) nitrate across the Site; and 7) tritium across the Site.	D,P	Z	Y,S,X	A	NO	NO
PNL-6315-2		100-BC	100-BC-5	1988	JC EVANS, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR JULY THROUGH DECEMBER 1987	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196002304	The purpose of the Hanford Site ground-water monitoring program is to monitor the distribution of radionuclides and other hazardous materials in ground water at the Hanford Site (Figure 1.1) and to evaluate the impact of past and present Site operations on the environment. The specific objectives of the program are to 1) determine the distribution of radionuclides and nitrate ion to define the extent of impacted ground water; 2) relate the distribution of these constituents to Site operations; 3) establish background concentrations for naturally occurring regulated hazardous materials; and 4) identify in the ground water those hazardous chemicals that resulted from Site operations. The Hanford Site ground-water monitoring program conducted by the Pacific Northwest Laboratory (PNL) involves the measurement of water-table elevations, collection and analysis of ground-water samples, computer modeling of contaminant transport, and use of geochemical models to meet these objectives.	D,P	Z	Y,S,X	A	NO	NO
PNL-7120		100-BC	100-BC-5	1989	JC EVANS, PNNL	HANFORD SITE GROUNDWATER MONITORING FOR JULY THROUGH DECEMBER 1988	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196029188	This semiannual report provides brief discussions and detailed data listings of results for ground-water monitoring at the Hanford Site during July through December 1988. This report presents and discusses the water table elevation map for the Hanford Site for December 1988 and results of ground-water sampling and analysis. The following contaminants are discussed in detail because of their high concentrations or widespread distribution: 1) carbon tetrachloride in the 200-West Area; 2) cyanide in and north of the 200-East and the 200-West Areas; 3) hexavalent chromium contamination in the 100, 200, and 600 Areas; 4) trichloroethylene in the vicinity of the Solid Waste Landfill, 100-F Area, and 300 Area; 5) nitrate across the Site; 6) tritium across the Site; and 7) other radionuclide contamination throughout the Site.	D,P	Z	Y,S,X	A	NO	NO

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PNNL-13080		100-BC, 100-FR, 100- HR, 100-KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	2000	PNNL, M.J. Hartman	HANFORD SITE GROUNDWATER MONITORING SETTING SOURCES AND METHODS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2760032	Groundwater monitoring is conducted on the Hanford Site to meet the requirements of the Resource Conservation and Recovery Act of 1976 (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA); U.S. Department of Energy (DOE) orders; and the Washington Administrative Code. Results of monitoring are published annually (e.g., PNNL-11989). To reduce the redundancy of these annual reports, background information that does not change significantly from year to year has been extracted from the annual report and published in this companion volume. This report includes a description of groundwater monitoring requirements, site hydrogeology, and waste sites that have affected groundwater quality or that require groundwater monitoring. Monitoring networks and methods for sampling, analysis, and interpretation are summarized. Vadose zone monitoring methods and statistical methods also are described. Whenever necessary, updates to information contained in this document will be published in future groundwater annual reports.	D, H	G, Z		A	NO	NO
PNL-7396		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1990	PNL, J.C. Evans	HANFORD SITE GROUNDWATER SURVEILLANCE FOR 1989	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196055127	The impact Hanford operations has on ground water is evaluated through the Hanford Site Ground-Water Surveillance program. The assessment is performed independent of other onsite ground-water monitoring programs, including the Hanford Site Operating Contractor's programs, to comply with regulatory requirements and to monitor facility operations. Five hundred and sixty-seven wells were sampled during 1989 for Hanford ground-water monitoring activities. This report contains a listing of analytical results for calendar year (CY) 1989 for species of importance as potential contaminants. Certain chemicals regulated by the Environmental Protection Agency (EPA) and the State of Washington Department of Ecology were also present in Hanford ground water near operating areas.		G, Z	Y		NO	NO
HW-74094		100-BC	100-BC-1	1963	N/A	HAZARDS SUMMARY REPORT DESCRIPTION OF 100-B 100-C 100-D 100-DR 100-F AND 100-H PRODUCTION REACTOR PLANTS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196008077	The purpose of this Hazards Summary Report, HW-74094 Volume 3, is to present a comprehensive physical description of the 100-B, 100-C, 100-D, 100-DR, 100-F and 100-H Production Reactor Plants at Hanford. This volume is part of an over-all Hazards Summary Report, and complements Volumes 1 and 2. A similar Hazards Summary Report, HW-74095, is being issued for the 100-I0 and 100-KW Production Reactor Plants at Hanford.		G, Z			NO	NO
WHC-EP-0273, ADDENDUM 1		100-BC	100-BC-1	1991	WHC, R.K. Wahlen	HISTORY OF 100-B AREA 105 BUILDING CONSTRUCTION DETAILS	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196078412	The 105 Building Construction Details document is being presented as an addendum to WHC-EP-0273, History of 100-B Area (WHC 1989) to supplement the documentation of historical information at the Hanford Site. The information presented in this addendum is from historical data. The text is presented in the period of time when there were only three reactor areas with one reactor in each area.	D				NO	NO
PNL-10400		100-BC		1995	PNL, B.A. Napier	IDENTIFICATION OF CONTAMINANTS OF CONCERN CRCIA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196039286	This report documents an initial review, from a risk perspective, of the wealth of historical data concerning current or potential contamination in the Columbia River. Sampling data were examined for over 600 contaminants. A screening analysis was performed to identify those substances present in such quantities that they may pose a significant human or ecological risk. These substances will require a more detailed analysis to assess their impact on humans or the river ecosystem.			Y	A	NO	NO
PNL-8281		100-BC	100-BC-1	1992	J LUEY, PNNL	IN-SITU VITRIFICATION OF MIXED WASTE CONTAMINATED SOIL SITE 116-B-6A CRIB AT HANFORD	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196133681	This demonstration has provided technical data to evaluate the ISV process for its potential in the final disposition of mixed-waste contaminated soil sites at Hanford. Because of the test's successful completion, technical data on the vitrified soil are available on how well the process incorporates transuranics and heavy metals into the waste form, how well the form resists leaching of transuranics and heavy metals, how well the process handles sites with high combustible loadings, and the important site parameters which may affect the achievable process depth. Results of core drilling conducted in April 1991 revealed that the melt growth during processing was more lateral than predicted.		G, Z		A	NO	NO
0100X-IG-G0001	Rev. 2	100-BC, 100-DR, 100-FR	100-BC-1, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2	1999	BHI	INSTRUCTION GUIDE FOR REMEDIATION OF 100 AREAS WASTE SITES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8702132	This instruction guide (IG) provides direction to field analytical personnel for implementing the 100 Area Remedial Action Sampling and Analysis Plan (SAP) (DOE-RL 1998a). The SAP is the controlling document for performing work. All references to the SAP appear as underlined and italics to distinguish SAP references from IG references. This IG will be revised as field conditions dictate or when upper-tier requirements in the SAP are changed. The IG is issued and controlled as an instruction guide. All revisions to the IG will be approved by the Resident Engineer using a Design Change Notice (DCN). The Resident Engineer for each of the remediation projects covered by the SAP will provide direction as needed and as described in this IG.			Y		NO	NO
PNL-8789		100-BC, 100-DR	100-BC-1, 100-BC-2, 100-BC-5, 100-DR-1, 100-DR-2	1993	PNL, A.T. Cooper, R.K. Woodruff	INVESTIGATION OF EXPOSURE RATES AND RADIONUCLIDE AND TRACE METAL DISTRIBUTIONS ALONG HANFORD REACH OF COLUMBIA RIVER	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196084641	This report describes a study conducted as an activity of the Hanford Site Surface Environmental Surveillance Project to investigate exposure rates and radionuclide and trace metal distributions along the Hanford Reach. The study was designed as a field survey rather than a statistically based sampling design. The results provide current external exposure rates, characterize radionuclide concentrations, and provide new data on the concentrations of trace metals in shoreline soils along the Hanford Reach. Trace metals are of interest because of their use and disposal to the river and soil column in reactor and chemical-processing operations.	D				NO	NO

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SD-EN-FDC-003	Rev. 0	100-BC	100-BC-1, 100-BC-2, 100-BC-3, 100-BC-4, 100-BC-5	1992	WHC, R.G. Bauer	MATERIAL HANDLING AND ANALYTICAL SYSTEM FOR 100-BC AREA MACROENGINEERING PROTOTYPE PROJECT	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196110663	The purpose of this document is to develop the FDC for the Materials Handling/Analytical Systems portion of the 100-B/C Area Prototype Project. Waste disposal is covered by a separate FDC document. Project scope includes: Twenty-nine past practice waste sites in the 100-B/C Area as identified in the Waste Information Data System (WIDS) database (WHIC 1991d). Buried reactor effluent pipelines including all junction boxes, valve pits, and associated components. Soil, associated with effluent pipeline leaks on land, which is contaminated above cleanup criteria limits. The portion of the reactor effluent pipelines extending into the Columbia River. Other structures or waste sites that are not listed in the WIDS database and are not addressed by other programs such as, but not limited to, the Decontamination and Decommissioning (D&D) Program, and Other contaminated soil that exceeds cleanup criteria limits that may be discovered during 100-B/C remediation, e.g., contamination resulting from unplanned or unreported releases.			Y	A	NO	NO
Not listed.		100-BC	100-BC-1	1987	N/A	NATIONAL PRIORITY LIST CANDIDATE DOE HANFORD 100 AREA	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196016807	Evaluation of Hanford 100 Area as National Priorities List candidate.	D		Y		NO	NO
SD-EN-PMP-001	Rev. 0	100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1991	WHC, R.L. Jackson	PROJECT MANAGEMENT PLAN RCRA GROUNDWATER MONITORING	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196124088	This Project Management Plan (PMP) describes the management system used by the Geosciences Group of the Environmental Engineering and Geotechnology Function to control Resource Conservation and Recovery Act (RCRA) groundwater monitoring on the Hanford Site. The activities controlled by this PMP include monitoring well network design and installation, monitoring well logging and testing, monitoring of groundwater quality and groundwater levels, analysis of monitoring well data, documenting these activities, and reporting of monitoring results for Hanford Site facilities falling under the authority of the RCRA.				A	NO	NO
PNNL-11958	Rev. 1	100-BC, 100-FR, 100- HR, 100- KR, 100-NR	100-BC-5, 100-FR-3, 100-HR-3, 100-KR-4, 100-NR-2	1998	PNNL, D.G. Horton, G.V. Last, S.P. Reidel	PROPOSAL FOR FY 1999 VADOSE ZONE MONITORING AND GUIDANCE FOR SUBSEQUENT YEARS FOR LIQUID WASTE DISPOSAL FACILITIES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D199047735	This document is prepared by Pacific Northwest National Laboratory in response to a U.S. Department of Energy request for a proposal describing vadose zone monitoring of liquid waste disposal facilities that are not part of the Tank Waste Remediation System. This document includes the needs and objectives of vadose zone monitoring and provides proposed rationale and general framework for vadose zone monitoring of past-practice cribs, ditches, trenches, and other disposal facilities. The monitoring described herein will be modified as necessary so as to be incorporated into the Groundwater Vadose Zone Integration Project.		G		A	NO	NO
SD-EN-QAPP-001	Rev. 3	100-BC	100-BC-5	1995	WHC	QUALITY ASSURANCE PROJECT PLAN FOR RCRA GROUNDWATER MONITORING ACTIVITIES	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195064447	This quality assurance project plan (QAPP) applies specifically to the field activities and laboratory analysis performed for all RCRA groundwater projects conducted by Hanford Technical Services. This QAPP is generic in approach and shall be implemented in conjunction with the specific requirements of individual groundwater monitoring plans.	D				NO	NO
PNL-3127		100-BC, 100-HR, 100-KR, 100-NR	100-BC-5, 100-HR-3, 100-KR-1, 100-KR-4, 100-NR-1	1980	PNL, M.J. Sula	RADIOLOGICAL SURVEY OF EXPOSED SHORELINES AND ISLANDS OF COLUMBIA RIVER BETWEEN VERNITA AND SNAKE RIVER CONFLUENCE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196044964	This document describes a radiological survey which was performed to evaluate the magnitude and distribution of radioactive contamination on the exposed shorelines of the Columbia River along and downstream of the Hanford Site. The area encompassed by the survey includes the low-lying exposed land on both sides of the river from the uppermost point of production reactor discharge into the river at 100-B Area to the confluence of the Snake and Columbia Rivers, almost 60 miles downstream of the starting point. External exposure rate measurements were made at nearly 30,000 locations during the survey accounting for approximately 60% of the land in the study area. Measurable radioactive contamination, resulting from past Hanford operations was found to be present on the shorelines of the Columbia River along the study area. The absence of short-lived radionuclides in the shore sediments and the presence of contamination several meters above recent maximum river levels indicate that the material was deposited some years ago.	D,P		Y,S,X		NO	NO
UNI-3714	Rev. 1	100-BC	100-BC-1, 100-BC-2, 100-BC-3, 100-BC-4, 100-BC-5	1987	UNC, J.M. Steffes, R.L. Miller	RADIONUCLIDE INVENTORY AND SOURCE TERMS FOR SURPLUS PRODUCTION REACTORS AT HANFORD	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196008078	The purpose of this document is to provide estimated inventories of radionuclides and other hazardous materials in the eight Hanford 100 Area surplus production reactor buildings. This information is intended to support the preparation of an Environmental Impact Statement (EIS) currently being prepared by Battelle Pacific Northwest Laboratory (PNL) for the final decommissioning of these facilities. The estimated reactor radionuclide inventories are based on previous analysis and physical measurements. Supporting documentation is included in the appendices and references. Hazardous material inventories are based upon recent walk-through inspections of each facility.	H		Y, S		NO	NO
RHO-RE-SR-84-24 P		100-BC, 100-HR, 100-KR, 300-FF	100-BC-5, 100-HR-3, 100-KR-4, 300-FF-5	1984	RHO, A.G. Law	RESULTS OF SEPARATIONS AREA GROUNDWATER MONITORING NETWORK FOR 1983	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195065298	The purpose of this report is to present a summary of the results of Rockwell Hanford Operation's (Rockwell 1's) ground-water monitoring program for the Separations Area of the Hanford Site, for calendar year 1983. This monitoring program is in partial fulfillment of the U.S. Department of Energy (DOE) requirement that all radioactivity in the environment shall be monitored. The 1983 report on all phases of environmental surveillance in the Separations Area is presented in Conklin, et al., 1984. The objectives of the monitoring program are to 1) evaluate the quality of ground water for compliance with DOE orders, 2) assess the performance of disposal and storage sites in the Separations Area, 3) determine the impact of waste disposal operations on the ground water, and 4) provide data for hydrologic analyses and model application.		Z			NO	NO

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RHO-RE-SR-85-24 P		100-BC	100-BC-5	1986	RHO, A.G. Law	RESULTS OF SEPARATIONS AREA GROUNDWATER MONITORING NETWORK FOR 1984	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195065507	The purpose of this report is to present a summary of the results for calendar year 1984 of the Rockwell Hanford Operations (Rockwell) groundwater monitoring program for the Separations Area of the Hanford Site. This monitoring program is in partial fulfillment of the U.S. Department of Energy (DOE) requirement that all radioactivity in the environment shall be monitored. The objectives of the monitoring program are to 1) evaluate the quality of ground water for compliance with Rockwell and DOE guidelines, 2) assess the performance of disposal and storage sites in the Separations Area, 3) determine the impact of waste disposal operations on the ground water, and 4) provide data for hydrologic analyses and model application.		Z			NO	NO
RHO-RE-SR-86-24 P		100-BC, 100-HR, 100-KR, 200-BP, 300 FF	100-BC-5, 100-HR-3, 100-KR-4, 200-BP-1, 300-FF-5	1986	RHO, A.G. Law	RESULTS OF SEPARATIONS AREA GROUNDWATER MONITORING NETWORK FOR 1985	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195065508	The purpose of this report is to present a summary of the results for calendar year 1985 of the Rockwell Hanford Operations (Rockwell) groundwater monitoring program for the Separations Area of the Hanford Site. This monitoring program is in partial fulfillment of the U.S. Department of Energy (DOE) requirement that all radioactivity in the environment be monitored. The objectives of the monitoring program are to (1) evaluate the quality of ground water for compliance with Rockwell and DOE guidelines, (2) assess the performance of waste disposal and storage sites in the Separations Area, (3) determine the impact of waste disposal operations on the ground water, and (4) provide data for hydrologic analyses and model application.		Z			NO	NO
RHO-RE-SR-87-24 P		100-BC	100-BC-5	1987	RHO, A.G. Law	RESULTS OF SEPARATIONS AREA GROUNDWATER MONITORING NETWORK FOR 1986	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195065509	The purpose of this report is to present a summary of the results for calendar year 1986 of the Rockwell Hanford Operations (Rockwell) groundwater monitoring program for radiological constituents in the Separations Area of the Hanford Site. This monitoring program is in partial fulfillment of the U.S. Department of Energy (DOE) requirement IN DOE Order 5484.1 that radioactivity in the environment be monitored and is also used for monitoring operating disposal facilities for compliance with DOE requirements. The objectives of the monitoring program are to (1) assess the quality of ground water for compliance with Rockwell and DOE guidelines, (2) evaluate the performance of Rockwell's disposal and storage sites in the Separations Area in order to remove improperly functioning cribs from service, (3) determine the impact of waste disposal operations on the ground water, and (4) provide data for hydrologic analyses and model application.		Z			NO	NO
WHC-EP-0609		100-BC, 100-DR	100-BC-1, 100-BC-2, 100-BC-5, 100-DR-1, 100-DR-2	1992	WHC, R.E. Peterson, V.G. Johnson	RIVERBANK SEEPAGE OF GROUNDWATER ALONG 100 AREA SHORELINE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196124079	Chemical and radiological data are described for samples of riverbank seepage, near shore river water, and sediment associated with seepage. Sampling locations are along the right bank (generally southern shoreline) of the Columbia River on the Hanford Site. Locations extend from the 100-B Area approximately 26 miles downstream to the northern edge of the Hanford Town site. The data were obtained during (1) environmental surveillance activities and (2) remedial investigations to characterize the influence of contaminated groundwater on the Columbia River. This report expands the initial interpretations of analytical results from the 1991 sampling project that was conducted along the 100 Areas shoreline (DOE-RL 1992a).			Y, S		NO	NO
BHI-00022		100-BC	100-BC-1	1994	JJ ZIMMER, BHI	SAFETY ASSESSMENT FOR 118-B-1 BURIAL GROUND EXCAVATION TREATABILITY TEST	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196021444	This revision of the Safety Assessment provides an auditable safety analysis of the hazards for the proposed treatability test activities per DOE-EM-STD-5502-94, DOE Limited Standard, Hazard Baseline Documentation (DOE 1994). The proposed activities are classified as radiological activities and as such, no longer require Operational Safety Limits (OSLs). The OSLs, Prudent Actions, and Institutional and Organization Controls have been removed from this revision and replaced with "Administrative Actions Important to Safety," as determined by the hazards analysis. Those Administrative Actions Important to Safety are summarized in Section I.1, "Assessment Summary." This document provides a summary of the hazard analysis and operational controls to ensure safe operation of the work associated with excavating, sampling, sorting, and replacing of waste buried in the 118-B-1 Burial Ground. Details of the effort are described in the test plan for this operation (DOE 1994a).	D	G	Y		NO	NO
BHI-01778		100-BC	100-BC-2	2005	BHI, W.S. Thompson	SAMPLING AND ANALYSIS INSTRUCTION FOR BOREHOLE SAMPLING AT 100-C-7	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA506617	This sampling and analysis instruction (SAI) provides the sampling and analytical requirements for characterizing the vertical distribution of chromium contamination in the deep zone soil below the 100-C-7 waste site. The "deep zone" refers to the portion of the vadose zone between the bottom of the waste site and the water table. The activities include drilling a characterization borehole, sampling the vadose zone and upper saturated zone soils at approximately 1.5-m (5-ft) intervals, collecting a water sample below the top of the water table in the unconfined aquifer, and analyzing the samples for the contaminants of concern (COCs).	D, H		Y		NO	NO
WCH-00154		100-BC	100-BC-1	2007	WHC, W.S. Thompson	SAMPLING AND ANALYSIS INSTRUCTION FOR EVALUATION OF RESIDUAL CHROMIUM CONTAMINATION IN SUBSURFACE SOIL AT 100-C-7	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA04509024	This sampling and analysis instruction (SAI) provides the requirements for sample collection and laboratory analysis to evaluate the extent of hexavalent chromium contamination present in the soil below the 100-C-7 and 100-C-7:1 remedial action waste site excavations.	D, H		Y		NO	NO

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08-AMCP-0017	Rev. 0	100-BC	100-BC-1	2007	DOE/RL, D.A. Brockman	SAMPLING AND ANALYSIS PLAN FOR ELECTRICAL RESISTIVITY CORRELATION FOR BC CRIBS AND TRENCHES AREA WASTE SITE DOE/RL-2007-13 REV0	http://www5.hanford.gov/arpir/?content=indpage&AKey=D06100902	This sampling and analysis plan (SAP) describes the ongoing evaluation of potential applications of the electrical resistivity (ERC) geophysical method to the vadose zone in the BC Cribs and Trenches Area. The ERC geophysical method detects changes in electrical resistivity in the vadose zone where sufficient moisture exists, the distribution of anions and cations, such as nitrate, that are associated with the resistivity changes may be inferred from the ERC scans, the distribution of contaminants of potential concern (COPC) that are associated with the detected anions or cations, such as Technetium-99 and nitrate are both COPCs in the BC Cribs and Trenches Area vadose zone and are expected to be co-located because they have similar partition coefficients (i.e., distribution coefficient values). A detailed explanation of the ERC geophysical method is attached in Appendix A.	D		Y		NO	NO
09-AMCP-0209	Rev. 0	100-BC	100-BC	2009	DOE/RL, M.S. McCormick	SAMPLING AND ANALYSIS PLAN FOR FOUR GROUNDWATER MONITORING WELLS IN THE 100-BC DECISION UNIT DOE/RL-2009-61 REV 1	http://www5.hanford.gov/arpir/?content=indpage&AKey=0909110453	This sampling and analysis plan (SAP) was written in support of the remedial investigation (RI)/ feasibility Study (IFS) process for the 100-BC Decision Unit to refine the definition of nature and extent of groundwater contaminants in the unconfined aquifer at four locations. This SAP describes the sampling and analysis to be performed associated with installation and sampling while drilling for four expedited groundwater monitoring wells.			Y		NO	NO
Not listed.		100-BC	100-BC-1	1989	PNNL	SITE CHARACTERIZATION PLAN FOR 116-B-6A CRIB ISV DEMONSTRATION	http://www5.hanford.gov/arpir/?content=indpage&AKey=D195062455	The purpose of this site characterization plan is to provide guidance to Pacific Northwest Laboratory (PNL) and its site characterization contractor for drilling and sampling the 116-B-6A crib (formerly 116-8-6-1 or 111-B crib) prior to a demonstration test of the in situ vitrification (ISV) process at site. This plan contains a short description of the ISV technology, a summary of the information known about the crib, the geology and hydrology of the surrounding area, and a description of the work to be performed in characterizing the crib prior to performing the ISV demonstration test.	D, H	G, Z	Y	A	NO	NO
WHC-SP-0969-40		100-BC	100-BC	1994	WHC, E.A. Schultz	SITE MANAGEMENT SYSTEM EXECUTIVE SUMMARY REPORT JULY 1994	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196059548	Key performance indicators show satisfactory/good progress in most areas. Emphasis on safety and rigorous conduct of operations continued during the month: outstanding environmental safety and health performance is noted for Safeguards and Security (WBS 6.6), Emergency Preparedness (WBS 6.7.2.3), Procurement (WBS 6.10.7), Public Information (WBS 6.10.6), Quality Improvements (WBS 6.10.9), Environmental Institute (WBS 6.10.10) and Advanced Reactor (WBS 7.3). Customer satisfaction is being maintained in a positive manner with outstanding ratings for Safeguards and Security (WBS 6.6), Public Information (WBS 6.10.6), Employee Concerns, (WBS 6.10.8), Environmental Institute (WBS 6.10.10) and Advanced Reactor (WBS 7.3).				A	NO	NO
Not listed.		100-BC	100-BC-1	1989	N/A	SITE VISIT ON NOVEMBER 9 1989	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196015093	The purpose of this report (Attachment A) is to summarize what was said in draft summaries from the attendees and to highlight areas of disagreement or further areas of investigation. In addition, certain problems were noted on the map we had. Those problems are also contained herein.	D				NO	NO
SD-EN-AP-080	Rev. 0	100-BC	100-BC-1	1992	WHC, M.T. Stankovich	SOURCE INVESTIGATION FIELD ACTIVITIES FOR 100-BC-1 OU DESCRIPTION OF WORK	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196092862	This document details the source investigation field activities of the 100-BC-1 Operable Unit and will serve as a field guide for those performing the work. It should be used in conjunction with Remedial Investigation/Feasibility Study Work Plan for 100-BC-1 Operable Unit, Hanford Site, Richland, Washington (DOE-RL 1991) for general investigation strategy and with Environmental Investigations and Site Characterization Manual (WHC 1988a) for specific procedures. This description of work (DOW) describes specific limited field investigation (LFI) activities and sampling locations in accordance with discussions initiated at the June 27, 1991, 100 Area work plan rescoping meeting and the January/February 1992, comment resolutions meetings.	D				NO	NO
SD-EN-RPT-004	Rev. 0	100-BC	100-BC-1	1993	MS GERBER, WHC	SUMMARY OF 100-BC REACTOR OPERATIONS AND RESULTANT WASTES HANFORD SITE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196132831	Summary of 100-BC Reactor Operations and Resultant Wastes Hanford Site.	D, H, P				NO	NO
WHC-EP-0601		100-BC	100-BC-1	1992	WHC, R.M. Mitchell, S.G. Weiss	SYNTHESIS OF ECOLOGICAL DATA FROM 100 AREAS OF HANFORD SITE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D19613322	The primary objective for the development of this document was to collect and synthesize into a single volume Hanford Site-related information of importance to current and future Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) activities conducted in the 100 Areas. The amount of information available is enormous with studies being conducted and reports issued continuously since 1943 (Becker 1990). Our review of this almost 50 years of available data has been exhaustive, but we make no claim that it is all inclusive. The emphasis has been placed in documents of a summary nature as well as broad-based ecological and radiological reports. The purpose here has been to emphasize the breadth of work having been conducted, providing the sources of this information and providing the interested researcher the opportunity to seek more detailed information from the more specialized reports. Thus, this report should be a springboard for discussion, from which more focused evaluations, can follow.	D		Y		NO	NO
UNI-3760		100-BC, 100-DR, 100-HR	100-BC-1, 100-BC-5, 100-DR-1, 100-HR-1	1986	UNC, I.D. Jacques	UNC ENVIRONMENTAL SURVEILLANCE REPORT FOR 100 AREAS FY 1985	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196018795	The UNC Environmental Surveillance Program for the 100 Areas provides monitoring of specific environmental media. The information is used to assist in evaluating the environmental impact of 100-N reactor facilities, the shutdown reactor facilities, and burial grounds in the retired 100 Areas. This document is used by UNC Nuclear Industries (UNC) primarily to evaluate facility operation and management practices. The report does not include estimates of radiation doses to the public resulting from the operation of 100 Area facilities. Reports of population dose commitments and other environmental information for the Hanford Site are prepared and issued by Battelle Pacific Northwest Laboratories (PNL). UNC provides radionuclide release information to PNL for the preparation of such documents.				A	NO	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
UNI-3807		100-BC	100-BC-1	1986	FG DEMENT, UNC	UNCONDITIONAL RELEASE OF 115-D 115-DR GAS RECIRCULATION FACILITY SUPERSTRUCTURE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196017755	The purpose of this report is to document the radiological unrestricted release of the 115-0 DR Building superstructure for demolition and burial in a non-contaminated disposal site. This document addresses the first part of the final decommissioning of the 115-0 DR Gas Recirculation Building. Specifically it addresses the unrestricted release of the superstructure. For the purpose of this report the superstructure is defined as that portion of the above-ground structure consisting of the walls and ceiling. The walls are further defined as all vertical surfaces beginning approximately one foot above the building floor. The in situ disposal of the floors, the remaining one foot section of wall and the below grade structure will be documented in a separate report using the ARCL methodology. The objective of this report is to demonstrate compliance with the criteria set forth in Table 11-1, UNI-M-31, Environmental Control Manual. The unrestricted release criteria for potentially contaminated surfaces are based on Groups 2 and 3 nuclides, in addition to the dispersed activity limits of 1 pCi/g alpha and 20 pCi/g beta-gamma.	D, H		Y	A	NO	NO
K1744		100-BC	100-BC-1	2009	ELR Consulting	VALIDATION SUMMARY ANALYTICAL LABORATORY 100 B/C BURIAL GROUNDS SOIL FULL PROTOCOL SAMPLING	http://www5.hanford.gov/arpir/?content=indpage&AKey=0910281410	This memo presents the results of data validation on Data Package No K 1744, prepared by Lionville Laboratory Inc. (ILLI). A list of samples validated along with the analyses reported and the method of analysis is provided.	D		Y	A	NO	NO
WHC-SD-EN-TI-216	REV 0	100 AREA 200 AREA	100 AREA 200 AREA	1994	WHC, J.A. Stegen	VEGETATION COMMUNITIES ASSOCIATED WITH 100 AREA AND 200 AREA FACILITIES ON HANFORD SITE	http://www5.hanford.gov/arpir/?content=indpage&AKey=D196108768	The Hanford Site, Benton County, Washington, lies within the broad semi-arid shrub-steppe vegetation zone of the Columbia Basin. Thirteen different habitat types on the Hanford Site have been mapped in Habitat Types on the Hanford Site: Wildlife and Plant Species of Concern (Downs et al. 1993). In a broad sense, this classification is correct. On a smaller scale, however, finer delineations are possible. This study was conducted to determine the plant communities and estimate vegetation cover in and directly adjacent to the 100 and 200 Areas, primarily in relation to waste sites, as part of a comprehensive ecological study for the Compensation Environmental Response, Compensation, and Liability Act (CERCLA) characterization of the 100 and 200 Areas.	D	E		A	NO	NO
HW-61206		100-BC	100-BC	1959	J.P. Corley	Effluent system modifications -- 100-B/C	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=10189787	The 107-B retention basin was constructed in 1943-44 as part of the original reactor installation. Thermal stressing has caused extensive cracking of the concrete walls and leaking at cracks and joints, requiring repeated maintenance including a major repair program in 1952-53. Although a major repair or replacement program will eventually be necessary, existing basin leakage does not require immediate action, other than periodic control effort, with one exception. Effluent from 107-B leakage is flowing into the 181-B river pump house forebay, measurably increasing the temperature of the raw water and raising the question of continued stability of the building foundation.	D				NO	YES
HW-43937		100-BC	100-BC	1956	D.S. Baker, D.W. McLenegan	Effect of increased electric loads on primary substation equipment in 100-B, C, D, DR, F, and H areas	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=10108346	The loading on the primary transformers which step down the 230 kv transmission voltage to a distribution voltage of 13.8 kv, at 100-B-C, 100-D-DR, 100-F, and 100-H Areas will be increased by the synchronous motors now being installed in those areas under Project CG-558. This report summarizes: The changes in electric loads (both kv and power factor) which will result when the new motors are placed in service and certain older motors are withdrawn from service. Electric loads are tabulated in section 4.0 for each area for present conditions, the planned changes and the post-CG-558 conditions.	D			A	NO	NO
HW-32960		100-BC	100-BC	1954	D.E. Stregé	Interim report, Production Test 105-522-E -- Examination of pile process tubes removed from 100-B, C, and D piles	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=10143144	The examinations of seven process tubes are covered in this report. Tubas reported on are 3362-B and 0561-C. These were removed under PT-105-522-P, "Routine Examination of Process Tubes". Tubes 2572-C and 2679-C were operating under PT-105-519-E, "Raising Permissible Outflow Water Temperatures of Certain Tubes at C Pile". In tube 2679-Z a rupture occurred during its operating period. These tubes (2572-C and 2679-C) were smaller diameter process tubes such as used in B, D, F, DR, and H Piles. Tube 2772-C was removed because of a suspected rupture. Tubes 3571-D and 2170-D were removed under PT-105-525-E.	D				NO	NO
RSVP-2008-003	Rev. 0	100-BC	100-BC	2008	J.M. Capron	Remaining Sites Verification Package for the 100-B-21:2 Subsite (100-B/C Discovery Pipeline DS-100BC-002), Waste Site Reclassification Form 2008-003	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=943192	The 100-B-21:2 waste site consists of the immediate area of the DS-100BC-02 pipeline. In accordance with this evaluation, the confirmatory and verification sampling results support a reclassification of this site to Interim Closed Out. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.	D, H		Y		NO	NO
RSVP-2008-027	Rev. 1	100-BC	100-BC	2008	J.M. Capron	Remaining Sites Verification Package for the 100-B-23, 100-B/C Area Surface Debris, Waste Site, Waste Site Reclassification Form 2008-027	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=943193	The 100-B-23, 100-B/C Surface Debris, waste consisted of multiple locations of surface debris and chemical stains that were identified during an Orphan Site Evaluation of the 100-B/C Area. Evaluation of the collected information for the surface debris features yielded four generic waste groupings: asbestos-containing material, lead debris, oil and oil filters, and treated wood. Focused verification sampling was performed concurrently with remediation. Site remediation was accomplished by selective removal of the suspect hazardous items and potentially impacted soils. In accordance with this evaluation, the verification sampling results support a reclassification of this site to Interim Closed Out. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.	D		Y		NO	NO

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HW-71201-RD	Rev.1	100-BC	100-BC	1961	M.H. Schack, W.J. Tupper	Owner-operator process and functional requirements interim modifications for improved coolant backup 100-B, C, D, DR, F, and H Reactors, Project CGI-905. Revision 1	http://www.osti.gov/bridge/product.biblio.jsp?query_id=128&page=0&osti_id=1017511	This document defines the users' process and functional requirements which shall be used as the basis for the preparation of the design for Project CGI-905, Interim Modifications for improved Coolant Backup 100-B, C, D, DR, F, and H Reactors. The objective in making these modifications is to provide improved reliability and adequacy in the last ditch reactor cooling systems for current and short-range forecast conditions. The purpose of this document is to define the process requirements of the modifications and additions to the last ditch cooling systems and to outline the functional descriptions of the proposed equipment.	D				NO	NO
HW-11374		100-BC	100-BC	1948	E.J. Filip	History of the reactivation of 100-B pile	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10186020	This report summarizes the preparations made for reactivation of the 100-B pile and the operational activities associated with the reactivation and subsequent operation up to the time of reaching desired power level. The period covered is from approximately June 1 1948 until July 16, 1948.	D				NO	NO
HW-49777		100-BC	100-BC	1957	W.D. Bainard	100-B Area flow analysis	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10137753	Results of experimental programs indicate that it might be desirable in the future to modify the existing reactors by replacing the aluminum process tubes with tubes made of a zirconium alloy. The zirconium tubes would be more corrosion resistant than the aluminum ones and would also be stronger at higher temperatures. These new tubes would have the same outer diameter as the present tubes (for ease of handling and in order to provide adequate graphite cooling) but would have a thinner wall (since zirconium alloy is both stronger and more expensive than aluminum). The inner diameter of the new tubes would therefore, be greater than in the present tubes.	D			A	NO	NO
WHC-SD-EN-TI-220	Rev. 0	100-BC	100-BC	1994	R.W. Carpenter	100-B area technical baseline report	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10178735	This document supports the environmental remediation effort of the 100-B Area by providing remediation planners with key data that characterize the 100-B and 100-C Reactor sites. It provides operational histories of the 100-B and 100-C Reactors and each of their associated liquid and solid waste sites.	D, H				NO	NO
HW-27778		100-BC	100-BC	1953	N.O. Strand	Maximum capacities of the 100-B water plant	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10189799	Increases in process water flows will be needed as the current program of increasing pile power levels continues. The future process water flows that will be required are known to be beyond the present maximum capacities of component parts of the water system. It is desirable to determine the present maximum capacities of each major component part so that plans can be made for modifications and/or additions to the present equipment to meet future required flows. The apparent hydraulic limit of the present piles is about 68,000 gpm. This figure is based on a tube inlet pressure of 400 psi, a tube flow of 34 gpm, and 2,000 effective tubes. In this document the results of tests and calculations to determine the present maximum capacities of each major component part of the 100-B water system will be presented. Emergency steam operated pumps will not be considered as it is doubtful of year around operation of a steam driven pump could be economically justified. Some possible ways to increase the process water flows of each component part of the water system to the ultimate of 68,000 gpm are given.	D			A	NO	NO
HW-11426		100-BC	100-BC	1948	G.B. Carlton	Start-up of the 100-B pile following 1569-B tube failure	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10188240	Tube 1569-B ruptured on September 22, 1948 and was replaced. Between the time of failure and final isolation of this tube, considerable water escaped into the graphite packing. As a result, the unit start-up and subsequent operation was quite different from that usually followed. This report has been prepared to summarize the observations and activities related to this operation.	D				NO	NO
RSVP-2005-038	Rev. 0	100-BC	100-BC	2005	R.A. Carlson	Remaining Sites Verification Package for the 128-B-2, 100-B Burn Pit #2 Waste Site, Waste Site Reclassification Form 2005-038	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=9145	The 128-B-2 waste site was a burn pit historically used for the disposal of combustible and noncombustible wastes, including paint and solvents, office waste, concrete debris, and metallic debris. This site has been remediated by removing approximately 5,627 bank cubic meters of debris, ash, and contaminated soil to the Environmental Restoration Disposal Facility. The results of verification sampling demonstrated that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also showed that residual contaminant concentrations are protective of groundwater and the Columbia River.	D,P	G,Z	Y	A	YES	NO
HW-67030		100-BC	100-BC	1960	M.H. Schack, W.J. Tupper	Improved coolant backup 100-B, D, F, DR, H and C areas design study	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10108362	Preliminary engineering studies have indicated the need for modifications and improvements to the reactor coolant backup systems of the old areas in order to provide adequate safety of operation at power levels programmed for the future. These evaluations of the coolant backup systems were based on the recently adopted reactor cooling safety criteria. It was concluded that the secondary coolant systems would be adequate in capacity and reliability for the proposed future operating conditions except for certain cases of natural disaster such as earthquake damage. It was concluded that the last ditch coolant systems would be inadequate for the proposed future reactor operating conditions. The purpose of this report is to define the scope of modifications and improvements required to provide adequate last ditch systems in the old areas for future operating conditions.	D			A	NO	NO
HW-34134		100-BC	100-BC	1955	D.E. Strege	Interim report, production test-105-522-E, examination of pile process tube removed from 100-B and 100-H Piles	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10125261	This report covers the examination of nine process tubes, five tubes from B Pile and four from H Pile. Four of the tubes from B Pile were removed because they were leaking and the fifth was removed because it contained a stuck ruptured slug. Tube 2681-H was removed for graphite mining, tube 2852-H was removed under PT 313-105-14M "In-Pile Evaluation of 63-S Aluminum Process Tubes," and two tubes were removed from channel 0961-H under PT 105-506-E, "Recirculation of Pile Cooling Water." Visual inspection was made of the inside and outside surfaces of the tubes before and after cleaning with cold 10 per cent nitric acid. Samples varying from one to four inches in length were taken from each section and transferred to the 108-B Metallurgical Laboratory for close examination to determine depth of pitting, 72-S cladding thickness, and wall thickness. These determinations were made at specific points in each section on what appeared to be the area of severest attack. It is indicated on six of the tubes where the sample was taken on the circumference of the tube.	D			A	NO	NO

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HW-40363-Del.		100-BC	100-BC	1955	T.H. Lyons	B-2076 -- Metal loader for ``C'' Elevator 100-B, D, DR, F, and H Areas	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10137779	This report provides justification for a metal loader for ``C'' elevator for the 100-B, D, DR, F, and H Areas. This proposed work is justified on the basis of increased irradiation capacity for plutonium production and miscellaneous improvements in efficiency of reactor front face work.	D				NO	NO
HW-66334-RD		100-BC	100-BC	1960	M.H. Schack, W.J. Tupper	Preliminary design basis modifications for improved coolant backup 100-B, D, F, H, DR, and C areas	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10145627	The purpose of this document is to establish the design scope for the proposed modifications to the reactor ``last ditch'' cooling systems in the 100-B, D, F, H, DR, and C Areas. The objective in making these modifications is to provide adequate ``last-ditch'' reactor coolant flows for safety of operation at power levels currently programmed for the period CY 1964 when additional ``last-ditch'' cooling facilities are planned in connection with major plant modifications. Additional interim modifications may be required for the last ditch system at the 100-C and DR Areas and for the export water system prior to major plant modifications during CY 1964-1965.	D				NO	NO
HW-7-2580		100-BC	100-BC	1945	R.R. Lunt	Special investigation of unusual incidents of August 29, 1945 at 100-B and September 7, 1945 at 100-F	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=10134814	This report presents a brief synopsis of an investigation of unusual incidents at the 100-B and 100-F areas at HAPO. (CBS)					NO	NO
RSVP-2005-041	Rev. 0	100-BC	100-BC	2005	R.A. Carlson	Remaining Sites Verification Package for the 600-233 Waste Site, Vertical Pipe Near 100-B Electrical Laydown Area, Waste Site Reclassification Form 2005-041	http://www.osti.gov/bridge/product.biblio.jsp?query_id=129&page=0&osti_id=945038	The 600-233 waste site consisted of three small-diameter pipelines within the 600-232 waste site, including previously unknown diesel fuel supply lines discovered during site remediation. The 600-233 waste site has been remediated to achieve the remedial action objectives specified in the Remaining Sites ROD. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.	D, H		Y		NO	NO
HW-68499		100-BC	100-BC	1961	J.D. Agar	100-C water plant	http://www.osti.gov/bridge/product.biblio.jsp?query_id=0&page=0&osti_id=10145436	System curves for each portion of the C Area Water Plant were obtained from referenced work and are presented in figures. Field test data, corroborating the calculated curves, are presented as singular points on the same graphs. Present maxima capacity of the C Area Filter Plant was 121,000 gpm with 118,000 gpm available for use as primary reactor coolant. Modifications to the filter effluent piping would increase this available flow to about 180,000 gpm. Of the 118,000 gpm available for C Reactor use, 10,000 to 12,000 gpm was demanded by B Area through the 183 BC intertie. The maximum flow that the intertie line could handle, without reducing the filter capacity of the C Area filters, is about 21,000 gpm.	D				NO	NO
HW-30401	Vol. 1, Rev. 1	100-BC	100-BC	1955	M.H. Russ	Design criteria: Reactor plant modification -- Project CG-558 and 100-C Area Alterations -- Project CG-600, Volume 1, Revision 1	http://www.osti.gov/bridge/product.biblio.jsp?query_id=0&page=0&osti_id=10137609	This document defines the basic criteria to be used in the preparation of detailed design for Project CG-558, Reactor Plant Modification for Increased Production and for Project CG-600, 100-C Area Alterations. It has been determined that the most economical method of increasing plutonium production within the next five years is by the modernization and improvement of the 100-B, 100-C, 100-D, 100-DR, 100-F, and 100-H reactor plants. These reactors are currently incapable of operating at their maximum potential power levels because of a limited availability of process cooling water. As a result of this program, it is estimated that 1650-2350 megawatts of total additional production will be achieved.	D,P				NO	NO
HW-35806		100-BC	100-BC	1955	D.E. Strege	Interim report, Production Test 105-522-E, Examination of pile process tubes removed from 100-C, D and F piles	http://www.osti.gov/bridge/product.biblio.jsp?query_id=0&page=0&osti_id=10141738	This report covers the examination of thirteen process tubes seven from F Pile, three from C Pile and three from D Pile. Five of the thirteen tubes were removed because they were leakers, four from F Pile and one from C Pile. One tube from F Pile and one from D Pile were removed. Reactor Section had requested the removal of two from F Pile to check for external corrosion. Two tubes, small diameter old pile annulus, were removed from C Pile under PT 105-519-E, ``Raising Permissible Outlet Water Temperatures of Certain Tubes at C Pile.'' Two tubes were removed from D Pile under PT 105-525-E, ``Effects of Water Quality on Operations.'' Visual inspection was made of the inside and outside surfaces of the tubes before and after cleaning in a cold 10 per cent nitric acid solution. Samples varying from one to four inches in length were taken from each section for metallurgical examination to determine depth of pitting, wall thickness, and spot check the 72-S cladding thickness. These determinations were made at selected points in each section on what appeared to be the area of severest attack.	D,P			A	NO	NO
WHC-SD-TP-DAP-010	Rev. 0	100-BC	100-BC	1996	Westinghouse Hanford, W.A. McCormick	Documentation and analysis for packaging for the 100 B/C Packagings	http://www.osti.gov/bridge/product.biblio.jsp?query_id=2&page=0&osti_id=659289	The purpose of this Documentation and Analysis for Packaging (DAP) is to certify that the packaging system currently in use for the 100 B and C Area large scale excavation and remediation campaign, meets the intent of U.S. Department of Transportation(DOT) requirements for bulk packaging (49 CFR 173.427) of radioactive materials, up to and including low specific activity (LSA) I quantities of Class 7 material.	D			A	NO	NO
WHC-SD-EN-TI-213	Rev. 1	100-BC	100-BC	1994	K.A. Bergstrom, J.W. Fassett	Geophysical investigations of French Drain 116-B-9, and Dry Well 116-B-10, 100 B/C Area	http://www.osti.gov/bridge/product.biblio.jsp?query_id=2&page=0&osti_id=10149939	French Drain 116-B-9 and Dry Well 116-B-10 are both located within the 100 B/C-2 Operable Unit, 100 B/C Area (Figure 1). The 116-B-9 French Drain is approximately 4 ft in diameter by 3 ft deep. The exact location and use of the drain is not clear. The 116-B-10 Dry Well is a 3 ft-diameter, tile-lined well on a concrete slab, 7 ft below the surface, overlain by a manhole cover (DOE-RL 1991). The exact location of the well is uncertain. The objective of the survey was to locate the Dry Well and the French Drain. The area to be investigated had several buildings in the area which subsequently have been torn down. Ground penetrating radar (GPR) was the geophysical method chosen for the investigation.	D	G		A	NO	NO

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DOE/RL-96-85	Rev. 0	100-BC	100-BC	1996	DOE/RL	Engineering evaluation cost analysis for the 100-B/C area ancillary facilities at the 108-F Building	http://www.osti.gov/bridge/product_biblio.jsp?query_id=3&page=0&osti_id=663393	In 1995, the US Department of Energy (DOE), Richland Operations Office (RL) conducted a removal site evaluation of selected facilities in the 100 Area of the Hanford Site in accordance with CERCLA and 40 Code of Federal Regulations (CFR) 300.410. The scope of the evaluation included the aboveground portions of the 108-F Biology Laboratory in the 100-F Area and all inactive ancillary buildings and structures in the 100-B/C Area, excluding the reactor building and the river outfall. Based on the evaluation, RL determined that hazardous substances in the 108-F Biology Laboratory and five of the 100-B/C Area facilities may present a potential threat to human health or the environment, and that a non-time critical removal action at these facilities is warranted. This determination was documented in an engineering evaluation/cost analysis (EE/CA) approval memorandum.	D, H		Y, S		NO	Yes
BEGINS FREESTONE ADDED ENTRIES														
10-AMRC-0087	REV 0	100-BC	100-BC-1	2010 APR	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-28 183-C HEADHOUSE TO THE 183-B PUMPHOUSE SODIUM DICROMATE TRANSFER PIPELINE REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0061/0084186/10-AMRC-0087 - Letter [1004260483] - 1.pdf	A reclassification of Interim Closed Out for the 100-B-28 waste site is supported based on site history, process knowledge, field observations and comparison of residual contaminant concentrations against RAGs. Residual concentrations at the 100-B-28 waste site support future unrestricted remaining sites land uses that can be represented by a rural residential scenario and are considered protective of human health, groundwater, and the Columbia River. The site does not have a deep zone or residual contaminant concentrations that would require any institutional controls.	D,P	Z	Y	A	YES	NO
10-AMRC-0089	REV 0	100-BC	100-BC-1	2010 APR	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-22:2 100B WATER TREATMENT FACILITIES REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0055/0084443/10-AMRC-0089 - Letter [1004260334] - 1.pdf	Residual conditions at the 100-B-22:2 waste site meet the remedial action objectives specified in the Remaining Sites ROD. The results of confirmatory and verification sampling demonstrate that residual contaminant concentrations do not preclude any future land uses and allow for unrestricted future use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. The site does not have any residual contaminant concentrations that would require institutional controls to prevent uncontrolled drilling or excavation into the deep zone. The basis for reclassification is described in detail in the attached Remaining Sites Verification Package for the 100-B-22:2, 100-B Water Treatment Facilities	D,H,P	Z	Y,X	A	NO	NO
2009-040	REV 0	100-BC	100-BC-1	2010 APR	MS FRENCH, LC BUELOW DOE/RL, EPA	WASTE SITE RECLASSIFICATION FORM OPERABLE UNIT 100-BC-1 WASTE SITE CODE 100-B-27	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0055/1005130008/[100513008]_0081.PDF	The 100-B-27 sodium dichromate spill meets the remediation action objectives specified in the Remaining Sites ROD. The results demonstrate that residual contaminant concentrations do not preclude any future land uses, and allows for unrestricted future use of shallow zone soils. The results also show that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The site has been excavated to groundwater, and all verification sampling results determined to meet the more restrictive shallow zone remedial action goals; therefore, no institutional controls for deep zone soils are required. The basis for reclassification is described in detail in the attached Remaining Sites Verification Package for the 100-B-27 Sodium Dichromate Spill.	D,P	Z	Y,X	A	NO	NO
10-AMRC-0071	REV 0	100-BC	100-BC-1	2010 MAR	MS FRENCH, LC BUELOW DOE/RL, EPA	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-21:4 PIPELINE FROM THE 105-C REACTOR TO THE 116-C-2B SUMP REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0055/0084532/10-AMRC-0071 - Letter [1003170892] - 1.pdf	The 100-B-21:4 pipeline from the 105-C Reactor to the 116-C-2B3 sump waste site verification sampling data, site evaluations, and supporting documentation demonstrate that this site meets the objectives. These results show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The acceptability of direct contact with residual deep zone contamination has not been demonstrated; therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone of the site are required.	D,P	Z	Y,X	A	NO	NO
10-AMRC-0056	REISSUE	100-BC	100-BC-1	2010 FEB	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-33 SOIL CONTAMINATION AREA ASSOCIATED WITH LEGACY WASTE REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0054/0084794/10-AMRC-0056 REISSUE - Letter [1002160628] - 1.pdf	The 100-B-33 waste site verification sampling data, site evaluations, and supporting documentation demonstrate that this site meets the objectives for interim close out. These results show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	NO	NO
10-AMRC-0058	REV 0	100-BC	100-BC-1	2010 FEB	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-32 SOIL CONTAMINATION AREA ASSOCIATED WITH LEGACY WASTE SCA#1 REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0054/0084788/10-AMRC-0058 - Letter [1002100270] - 1.pdf	This report demonstrates that the 100-B-32 Soil Contamination Area Associated with Legacy Waste, SCA #1 waste site meets the objectives for Interim Closed Out. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. Site contamination did not extend into the deep zone soils; therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone are not required.	D,P	Z	Y,X	A	NO	NO
10-AMRC-0055	REV 0	100-BC	100-BC-1	2010 FEB	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-25 OVERFLOW SPILLWAY (132-B-6 OUTFALL) REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0054/0084789/10-AMRC-0055 - Letter [1002100345] - 1.pdf	This report demonstrates that the 100-B-25 Overflow Spillway waste site meets the objectives for interim closure. These results show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that contaminant level remaining in the soil are protective of groundwater and the Columbia River. Site contamination extended slightly into the deep zone soils; however, the remediation footprint was evaluated against the more restrictive shallow zone criteria. Therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone are not required.	D,P	Z	Y,X	A	YES	NO

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2008-052	REV 0	100-BC	100-BC-1	2009 APR	MS FRENCH DOE-RL	WASTE SITE RECLASSIFICATION FORM OPERABLE UNIT 100-BC-1 WASTE SITE CODE 100-B-21;3	http://www5.hanford.gov/pdw/fsd/AR/FS0001/FSD0050/0905200834/090520083341.PDF	This report demonstrates that the 100-B-21;3 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone or residual contaminant concentrations that would require any institutional controls.	D,P	Z	Y,X	A	YES	NO
2008-003		100-BC	100-BC-1	2008 JUN	DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-21;2	http://www5.hanford.gov/pdw/fsd/AR/FS0001/FSD0044/0807090165/0078384%20-%20108070901651.PDF	This report demonstrates that the 100-B-21;2 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2007-020		100-BC	100-BC-1	2007 NOV	SL CHARBONEAU, LC BUELOW DOE-RL, EPA	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-18	http://www5.hanford.gov/pdw/fsd/AR/FS0001/FSD0019/DA06476813/1.PDF	This report demonstrates that the 100-B-18 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2007-015		100-BC	100-BC-1	2007 AUG	SL CHARBONEAU, DA FAULK DOE-RL, EPA	WASTE SITE RECLASSIFICATION FORM 100-BC-1 1607-B1	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0002/da05739867/1.pdf	This report demonstrates that the 1607-B1 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2006-055		100-BC	100-BC-1	2007 MAR	DA FAULK, KD BAZZELL EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 1607-B2	http://www5.hanford.gov/pdw/fsd/AR/FS0001/FSD0042/DA04725437/DA04725437_38607_354.pdf	This report demonstrates that the 1607-B2 and 100-B-14;2 waste sites meet the objectives for interim closure. Portions of the pipelines within the 100-B-14;2 subsite have also been identified as the 100-B-14;8 and 100-B-14;9 subsites; the latter two subsite designations have been administratively cancelled to resolve the redundancy. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. This site does not have a deep zone component; therefore, no deep zone institutional controls are required.	D,H,P	Z	Y,S,X	A	YES	NO
2007-004		100-BC	100-BC-1	2007 MAR	DA FAULK, KD BAZZELL EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 126-B2 183-B CLEARWELLS	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0004/da04724514/da04724514_38599_23.pdf	This report demonstrates that the 126-B2 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2004-005		100-BC	100-BC-1	2007 FEB	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-14 1	http://www5.hanford.gov/arpir/?content=indpage&AKey=DA04601273	This report demonstrates that the 100-B-14;1 waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. The acceptability of unrestricted exposure to deep zone portions of this site has not been demonstrated; therefore, institutional controls to prevent uncontrolled drilling/excavation are necessary.	D,H,P	Z	Y,X	A	YES	NO
2006-058		100-BC	100-BC-1	2006 NOV	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 128-B-3	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0004/da04192849/da04192849_37875_177.pdf	This report demonstrates that the 128-B-3 waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are sufficiently protective of groundwater and the Columbia River to preclude further remedial action. Institutional controls are required to prevent activities that would mobilize residual contamination at the river embankment area until residual contaminant concentrations can be evaluated in the context of a baseline risk assessment. No institutional controls are warranted for the upland portions of the site.	D,H,P	Z	Y,X	A	YES	NO
2006-019		100-BC	100-BC-1	2006 SEPT	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-20	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0005/da03898197/da03898197_37485_38.pdf	This report demonstrates that the 100-B-20 waste site meets the objectives for interim closed out. These results show that residual soil concentrations support future land uses that can be represented by rural residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The depth of excavation for the 100-B-20 waste site was 2.1 in ft. As such, this site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2006-057		100-BC	100-BC-1	2006 SEPT	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 120-B-1	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0005/da03897674/da03897674_37472_41.pdf	This report demonstrates that the 120-B-1, 105-B Battery Acid Sump waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required. The pipelines associated with the battery acid sump are not included as part of the 120-B-1 waste site. The pipelines are included as a subsite within the 118-13-8, 105-B Reactor Building, waste site.	D,P	Z	Y,X	A	YES	NO

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2006-051		100-BC	100-BC-1	2006 SEPT	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-24	http://www5.hanford.gov/pdw/fsd/ar/fsd001/fsd0007/da03768363/da03768363_47132_20.pdf	This report demonstrates that the 100-B-24 site meets the objectives for no action. These results show that residual contaminant concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that residual contaminant levels are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
WCH-157		100-BC	100-BC-1	2007 MAR	WS THOMPSON WCH	SAMPLING AND ANALYSIS INSTRUCTION FOR BOREHOLE SAMPLING AT 118- B-1 BURIAL GROUND	http://www5.hanford.gov/pdw/fsd/ar/fsd001/fsd0001/da05973604/1.pdf	WCH Field Remediation Project has removed all of the disposed materials and contaminated soil from 118-B-1 Burial Ground with one exception, soil contaminated from tritium that also contributes to further contamination. This SAI provides requirements for sample collection and lab analysis for characterization of the vertical distribution or tritium contamination in the vadose soil below the 118-B-1 Burial Ground remedial action excavation.	D,P	G,Z	Y,S,X	A	NO	NO
130128	REV 0	100-BC	100-BC-1	2006 OCT	DN STROM WCH	SITE SPECIFIC INSTRUCTION FOR CLOSEOUT APPROACH AT 118-B-1 100B/C BURIAL GROUND REMEDIAL ACTION PROJECT HANFORD SITE RICHLAND WA	http://www5.hanford.gov/pdw/fsd/ar/fsd001/fsd0001/da05973661/1.pdf	The purpose of this SSI is to document the agreements between DOE, EPA, and WCH concerning the close-out of 118-B-1. It will address remedial operations, radiological surveys, Ground Penetrating Radar results, Anomalous items, focused sampling, COCs, BCL stockpiles, Overburden stockpiles, prior spoils material, SSNF discovered, sample design, and close-out sampling.	D,P	G	Y	A	NO	NO
N/A		100-BC	100-BC-1 100-BC-2	2006 FEB	WCH	FINAL DRAFT OF CHROMIUM TREATMENT PLAN INCLUDES FS-ERDF-TP-003 DRAFT REV 000 DATED FEBRUARY 1 2006 ERDF WORK PLAN TREATMENT PLAN OF 100-C-7 SITE CHROMIUM CONTAMINATED SOILS	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0009/DA02072002/DA02072002_34866_11.pdf	The scope of this treatment plan involves the treatment of chromium-contaminated waste from the 100-C-7 Site. If other chromium-contaminated soil is discovered at other waste sites in the 100 Area that are similar to 100-C-7, the use of this treatment plan will be allowed on a case-by-case basis. The plan covers analysis of the treatment method, the treatability experiments, and the full-scale treatment process.	D		Y	A	NO	NO
570537		100-BC	100-BC-1 100-BC-2	2006 JAN	DA FAULK, DC SMITH EPA, DOE-RL	TREATMENT PLAN FOR TREATMENT OF 116-C-3 CHEMICAL WASTE TANKS JANUARY 24 2006	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0009/DA01974601/DA01974601_3601_34725_10.pdf	The 116-C-3 chemical waste tanks were constructed in 1955 to receive and store chemical and radioactive waste from the 105-C Reactor Metal Examination Facility dejacketing process. The Metal Examination Facility was part of the 105-C Reactor complex and was designed to examine and test irradiated fuel elements. This documents the approval of this treatment plan.	D		Y		NO	NO
DFS-ERDF-029	REV 0	100-BC	100-BC-1	2005 AUG	BHI	TREATMENT PLAN FOR TREATMENT OF 100-C-7 REMAINING PIPELINES AND SEWERS OF CHROMIUM CONTAMINATED SOILS	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0045/DA01059505/DA01059505_9505_58782194_79168_16.pdf	As a result of remedial activities performed at various burial grounds, several small waste streams will require stabilization treatment of Resource Conservation and Recovery Act of 1976 metals with concentrations above LDR limits. One such waste stream is the 100-C-7 Remaining Pipelines and Sewers (RPAS) site. The waste stream requires stabilization treatment of chromium prior to disposal in the Environmental Restoration Disposal Facility (ERDF) at the Hanford Site. The contribution from chromium in the waste exceeds the LDR limit.	D		Y		NO	NO
2006-052		100-BC	100-BC-1	2006 SEPT	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-26	http://www5.hanford.gov/pdw/fsd/ar/fsd001/fsd0007/da03768427/da03768427_47134_23.pdf	This report demonstrates that the 100-B-26 site meets the requirement for a no action decision. The confirmatory sampling results show that contaminant levels remaining in the soil are more protective of groundwater and the Columbia River than the mobilization of contaminants that is possible during remediation of the site. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2005-042		100-BC	100-BC-1	2006 SEPT	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-22:1	http://www5.hanford.gov/pdw/fsd/ar/fsd001/fsd0007/da03768129/da03768129_47125_24.pdf	This report demonstrates that the 100-B-22:1 waste site meets the objectives for interim closure. These evaluations show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The evaluations also demonstrate that residual contaminant concentrations support unrestricted future use and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2005-028		100-BC	100-BC-1	2006 AUG	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 126-B-3	http://www5.hanford.gov/pdw/fsd/ar/fsd0008/da03467799/da03467799_36516_123.pdf	This report demonstrates that the 126-B-3 waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. Deep zone portion of this site meet the direct exposure cleanup criteria for the rural-residential scenario; therefore, no deep zone institutional controls are required.	D,H,P	Z	Y,X	A	YES	NO
2006-016		100-BC	100-BC-1	2006 APR	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 118-C-3:3	http://www5.hanford.gov/pdw/fsd/ar/fsd0007/da02465316/da02465316_35410_31.pdf	This report demonstrates that the 118-C-3:3 site meets the objectives for interim closed. It can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2005-052		100-BC	100-BC-1	2006 FEB	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-21:1 DS-100BC- 016 AND DS-100BC-022	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0009/DA02034986/DA02034986_3986_34760_13.pdf	This report demonstrates that the DS-100BC-016 and DS-100BC-022 pipelines, which are part of the 100-13-21 waste site, and designated as 100-B-21:1, meet the objectives for no action. These results show that residual soil concentrations support fixture land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P		Y	A	NO	NO
2005-038		100-BC	100-BC-1	2005 DEC	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 128-B-2	http://www5.hanford.gov/pdw/fsd/ar/fsd0001/fsd0009/DA01649125/DA01649125_9125_34006_102.pdf	This report demonstrates that the 128-B-2 Burn Pit waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,H,P	Z	Y,X	A	YES	NO

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2005-009		100-BC	100-BC-1	2005 JUN	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-16	http://www5.hanford.gov/pdw/fsd/AR/FS/D0001/FSD0012/DA505671/DA505671_40091_26.pdf	This report demonstrates that the 100-B-16 Utility Poles and Fixtures Debris Pile site (100-B-16 site) meets the objectives for interim closure. These results show that residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future land uses of shallow zone soil and contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
CVP-2005-00001	REV 0	100-BC	100-BC-1	2005 APR	BHI	WASTE SITE RECLASSIFICATION FORM 118-B-3 BURIAL GROUND 100-BC-1	http://www5.hanford.gov/arpir/?content=detail&AKey=D7892257	This cleanup verification package (CVP) documents that the 118-13-3 Burial Ground and its adjacent staging pile areas were remediated. Geophysical investigations and test pit excavations indicate that the 118-B-2 Burial Ground was located within the mapped boundaries of the 118-B-3 Burial Ground and is treated as such in this CVP. The 118-B-2 and 118-B-3 Burial Grounds are combined in this CVP and are collectively referred to as the 118-B-3 Burial Ground. The preferred remedy specified in the 100 Area Burial Grounds ROD and conducted for the 118-B-3 Burial Ground was excavation, treatment as necessary, and disposal of contaminated materials at the Environmental Restoration Disposal Facility (ERDF).	D,H,P	G,Z	Y,S,X	A,M	YES	NO
2004-004		100-BC	100-BC-1	2004 JUL	DA FAULK, SJ OLINGER EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 118-B-9	http://www5.hanford.gov/arpir/?content=detail&AKey=D5806324	The 118-B-9 104-B-1 Tritium Vault and 104-13-2 Tritium Laboratory (104-B-2 Storage Building) (collectively referred to as the 118-B-9 site) sample results demonstrate that the site achieves remedial action objectives and remedial action goals. These results show that residual concentrations will support future unrestricted land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil, and contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The site does not have a deep zone, therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2004-003		100-BC	100-BC-1	2004 JUL	DA FAULK, SJ OLINGER EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-11	http://www5.hanford.gov/arpir/?content=detail&AKey=D5806352	The 100-B-11 115-B/C Caisson, Sump, Drywell, Tank and Caisson Valve Pit Site (collectively referred to as the 100-B-11 site) sample results demonstrate that the site achieves remedial action objectives and remedial action goals. These results show that residual concentrations will support future unrestricted land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil, and contaminant levels remaining in the soil are protective of groundwater and the Columbia River. The site does not have a deep zone, therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2004-007		100-BC	100-BC-1	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-14:3	http://www5.hanford.gov/arpir/?content=detail&AKey=D5382911	The 100-B-14:3 West process Sewer Pipelines Site sample results demonstrate that the site achieves the remedial action objectives and remedial action goals. These results show that scale in -the pipelines and associated residual soil concentrations support future unrestricted land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of vadose zone soil and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. Because all results attained the direct exposure remedial action goals (RAGS), deep zone institutional controls are not required.	D,P	Z	Y,X	A	YES	NO
2004-010		100-BC	100-BC-1	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-14:6	http://www5.hanford.gov/arpir/?content=detail&AKey=D5382962	The Waste Site Evaluation for 184-B Powerhouse Pipelines 100-B-14:6 (BHI 2003a) (referred to as the 100-13-14:6 site) sample results demonstrate that the site achieves the remedial action objectives and remedial action goals. These results show that scale and associated residual soil concentrations support future unrestricted land uses that can be represented by a rural-residential scenario. The results also demonstrate that residual containment concentration supports unrestricted future use of shallow zone soil, and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	Z	Y,X	A	YES	NO
2004-009		100-BC	100-BC-1	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-14:5	http://www5.hanford.gov/arpir/?content=detail&AKey=D5382940	The 100-B-14:5 Sodium Dichromate and Sodium Silicate Line (BHI 2003a) (referred to as the 100-B-14:5 site) sample results demonstrate that the site achieves the remedial action objectives and remedial action goals. These results show that any residual soil concentrations support future unrestricted land uses that can be represented by a rural-residential scenario. The results demonstrated that residual concentrations support unrestricted future use of shallow zone soil, and that contaminated levels remaining in the soil are protective of groundwater and the Columbia River. The site does not have a deep zone, therefore, institutional controls are not required.	D,P	Z	Y,X	A	YES	NO
2004-011		100-BC	100-BC-1	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 100-B-14:7	http://www5.hanford.gov/arpir/?content=detail&AKey=D5382988	The 100-B-14:7/185-B/190-B Sump/Pipeline Site sample results demonstrate that the site achieves the remedial action objectives and remedial action goals. These results show that any residual soil concentrations support future unrestricted land uses that can be represented by a rural-residential scenario. The results demonstrated that residual concentrations support unrestricted future use of shallow zone soil, and that contaminated levels remaining in the soil are protective of groundwater and the Columbia River. The site does not have a deep zone, therefore, institutional controls are not required.	D,P	Z	Y,X	A	YES	NO
2003-44		100-BC	100-BC-1	2004 MAR	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 132-B-1	http://www5.hanford.gov/pdw/fsd/AR/FS/D0001/FSD00015/D4855052/D4855052_23233_18.pdf	The Waste Site Evaluation for 132-B-1; 108-B Tritium Separation Facility demonstrates that historical data is of sufficient quality and quantity to support no action interim closure of the 132-B-1 site. The site achieves the remedial action objectives and the corresponding remedial action goals. Any residual concentrations will support future land uses that can be represented by a rural-residential scenario, and that based on RESidual RADioactivity modeling, residual concentrations at the site pose no threat to groundwater or the Columbia River.	D,H,P	Y	A	YES	NO	

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2003-27		100-BC	100-BC-1	2004 JAN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 132-B-5	http://www5.hanford.gov/arpir/?content=indpage&AKey=D4854516	The Waste Site Evaluation for 132-B-5, 115-B/C Gas Recirculation Facility (Calculation No. 0100B-CA-V0129) (BI-11 2003) demonstrates that historical data supports no action interim closure of the 132-B-5 site. The site achieves the remedial action objectives and the corresponding remedial action goals. Residual soil concentrations support future land uses that can be represented a rural-residential scenario and pose no threat to groundwater or the Columbia River based on RESidual RADioactivity (RESRAD) modeling.	D,H,P		Y	A	YES	NO
2003-11		100-BC	100-BC-1	2003 DEC	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 132-B-3	http://www5.hanford.gov/arpir/?content=detail&AKey=D4854329	The Waste Site Evaluation for 132-B-3, 108-B Ventilation Exhaust Stack Site (Calculation No. 0100B-CA-V0127) (BHI 2003) demonstrates that historical data supports no action interim closure of the 132-B-5 site. The site achieves the remedial action objectives and the corresponding remedial action goals. Residual soil concentrations support future land uses that can be represented a rural-residential scenario and pose no threat to groundwater or the Columbia River based on RESidual RADioactivity (RESRAD) modeling.	D,H,P		Y	A	YES	NO
2003-052		100-BC	100-BC-1	2003 DEC	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-1 116-B-15	http://www5.hanford.gov/arpir/?content=indpage&AKey=D4855165	The Waste Site Evaluation for the 116-B-15 Pond 105-B Fuel Storage Basin Cleanout Percolation Pit (BI-11 2003) demonstrates that the site meets the objectives for interim closure. Residual soil concentrations at the site support future land uses that can be represented (or bounded) by a rural-residential scenario and pose no threat to groundwater or the Columbia River.	D,P		Y	A	NO	NO
CVP-2004-00003	REV 0	100-BC	100-BC-1	2004 MAY	BHI	CLEANUP VERIFICATION PACKAGE FOR THE 118-B-5 BURIAL GROUND	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/1010201075/10102010751.pdf	The purpose of this cleanup verification package (CVP) is to document that the 118-B-5 Ball 3X Burial Ground site was remediated. The 100 Area Burial Grounds ROD provides the U.S. Department of Energy, Richland Operations Office the authority, guidance, and objectives to conduct this remedial action. The preferred remedy specified in the 100 Area Burial Grounds ROD and conducted for the 118-B-5 site was excavation, treatment as necessary, and disposal of contaminated materials at the Environmental Restoration Disposal Facility (ERDF).	D,H,P	G,Z	Y,S,X	A,M	YES	NO
DOE/RL-99-58	REV 1 DRAFT A	100 AREA 300 AREA	100 AREA 300 AREA	2003 FEB	DOE-RL	SAMPLING AND ANALYSIS PLAN FOR 100 300 AREA REMAINING SITES	http://www5.hanford.gov/pdw/fsd/ar/fsd/001/1sqd0002/d0999190/d0999190_223.pdf	This sampling and analysis plan (SAP) presents the strategy for sampling and analysis activities that will support no action or remediation decisions for the 100/300 Area "remaining sites." The term "candidate site" has been used to distinguish the remaining sites from source and solid waste sites where contaminant levels are known to exceed the action levels. The purpose of the sampling and analysis activities indicated is to collect sufficient data to support RTD or no action decisions. This SAP is based on the Data Quality Objectives Summary Report for 100/300 Area Remaining Sites Analytical Sampling Effort (BHI-2003). This SAP addresses more than 200 candidate sites and will also address sites identified in the future.	D,H,P	G,Z	Y	A,M	NO	YES
02-ERD-0057		100-BC	100-BC-1 100-BC-2	2002 MAR	M MCCORMICK DOE-RL	AIR MONITORING PLAN FOR 100-BC AREA BURIAL GROUNDS	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0019/D9035395/D9035395_20788_6.pdf	The Air Monitoring Plan for 100-B/C Area Burial Grounds Remedial Action (BHI-2001 a) addresses air monitoring required for remedial action of the 100-B/C Area burial grounds, including test pitting and trenching. This addendum provides additional information regarding test pitting and trenching.	D,P		Y,X		NO	NO
N/A		100-BC	100-BC-1	2001 DEC	MF GEARHEARD, KA KLEIN EPA, DOE-RL	ACTION MEMORANDUM HANFORD 100 AREA NPL 105- B REACTOR B-REACTOR FACILITY HANFORD SITE BENTON COUNTY WASHINGTON	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0020/D8979346/D8979346_20236_11.pdf	This Action Memorandum constitutes approval of the U.S. Department of Energy's (DOE) proposed removal action as described herein for hazard mitigation at the 105-B Reactor Facility. This removal action reduces the potential for a release of hazardous substances that could adversely affect public health or welfare or the environment, and is protective of worker personnel. The purpose of this non-time-critical removal action is to take appropriate action to mitigate the threat to Site workers, public health or welfare or the environment by removing hazardous substances from the facility.	D,P		Y		NO	YES
534509		100-BC	100-BC-1	2001 MAY	D FAULK, DC SMITH EPA, DOE-RL	CONCURRENCE TO 105-B STANDING LEGACY WASTEMANAGEMENT PLAN SUPPORTING B-REACTOR SURVEILLANCE AND MAINTENANCE	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0021/D8722725/D8722725_28804_12.pdf	This plan identifies guiding documents for waste management activities and requirements for the removal, staging, characterization, and disposal of standing legacy waste contained in the 105-B reactor. These activities are occurring while undergoing an Engineering Evaluation/Cost Analysis study and review for the hazard mitigation requirements for continued public access.	D,P		Y		NO	NO
00-ERD-172		100-BC	100-BC-1	2000 OCT	HE BILSON DOE-RL	100 AREA BURIAL GROUND RECORD OF DECISION	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0022/D8504570/D8504570_27737_64.pdf	This decision document presents the selected interim remedial actions for portions of the DOE 100 Area Burial Grounds. This decision is based on the Administrative Record for this site and for the specific operable units.	D,H,P	G,Z,E	Y,S,X	M	YES	YES
00-ERD-140		100 AREA	100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-1	2000 JUL	OC ROBERTSON DOE-RL	REMOVAL OF HANFORD REACTORS OUTFALL STRUCTURES	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0022/D8406776/D8406776_27277_6.pdf	This memo describes the current plan to remove the remaining outfall structures associated with the retired plutonium production reactors at the Hanford Site.	D	E			NO	NO
79634		100-BC	100-BC-1	2000 MAY	DOE-RL	ADMINISTRATIVE RECORD AND CR-6 CANCER RISK RECALCULATION	http://www5.hanford.gov/arpir/?content=indpage&AKey=D8342874	An error was identified in the value used to compute the carcinogenic risk for Cr (VI) in past CVPs. The correct value is 2.1 mg/kg, which corresponds to a risk of 1 E-6 via the inhalation pathway. This value has not been used in past CVPs; the value used has generally been 400 mg/kg (value for noncarcinogenic effects).			Y		YES	NO
DOE/RL-99-59	REV 1	100 AREA	100-BC-1 100-BC-2 100-DR-1 100-DR-2 100-FR-1	2000 MAY	DOE-RL	PROPOSED PLAN FOR 100 AREA BURIAL GROUNDS INTERIM REMEDIAL ACTION	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0023/D8317795/D8317795_26984_39.pdf	This Proposed Plan identifies the preferred alternative for interim remedial action at 45 solid waste burial grounds located in the 100 Area source operable units. In addition, the Plan includes summaries of other alternatives analyzed for remediation of the burial grounds. The burial grounds were used for near-surface disposal of solid wastes containing primarily radiological hazardous substances that were generated during the operation of the Hanford Site's nine former plutonium-production reactors. Because of these radioactive hazardous substances, the 100 Area Burial Grounds present a potential threat to human health and the environment.	D,P	G,Z,C,E	Y,S,X		YES	YES
77996		100 AREA	100 AREA	2000 MAR	DOE-RL	MEETING MINUTES UNIT MANAGERS MEETING REMEDIATION ACTION AND WASTE DISPOSAL UNIT SOURCE OU 100 AREA JULY 1999	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0023/D8282132/D8282132_26851_33.pdf	Meeting minutes that contain a presentation on the revegetation of 100-C and other comments. Evaluate practical ways of revegetating remediated sites to native plant species. Varied topsoil and water treatments. Used only seeds of native species. First large-scale seeding with native species on a remedial action site.		G,E	Y		NO	NO

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DOE/RL-99-12	REV 1	100 AREA	105-B, 105-D, 105-H, 105-KE, 105-KW	1999 APR	DOE-RL	SAMPLING AND ANALYSIS PLAN FOR DISPOSITION OF STANDING LEGACY WASTE IN 105-B B-REACTOR 105-D 105-H 105-KE 105-KW REACTOR BUILDINGS	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D199105357/D199105357_58686324_78644_84.pdf	This sampling and analysis plan (SAP) presents the rationale and strategy for the sampling and analysis activities that support disposition of legacy waste in the 105-B, 105-D, 105-H, 105-KE, 105-KW Reactor buildings. The purpose of the proposed sampling and analysis activities is to characterize the legacy waste for waste designation and compliance with waste acceptance criteria for the relevant disposal facility. This document also includes the legacy waste air monitoring plan summary that addresses the potential radionuclide air emissions that could be generated during legacy waste removal activities, and identifies methods that will be utilized to control and monitor emissions.	D,H,P	G,Z	Y	A,M	NO	YES
NPL-111		100-BC	100-BC-1	1997 JAN	DOE-RL	100 NPL AGREEMENT CHANGE CONTROL FORM CLOSE OUT OF THE 116-B-5 CRIB	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0059/0084261/NPL-111.pdf	The purpose of this verification package is to demonstrate attainment of the remedial action objectives for the 116-B-5 Crib. An evaluation of data collected during remedial actions is presented in this package for deep zone verification, excavated soil, side slopes and overburden. The site is located within the 100-BC-1 Operable Unit.	D,H,P	Z	Y,X	A	NO	NO
35238		100-BC	100-BC-1	1996 AUG	JE RASMUSSEN, NA WERDEL DOE-RL	REQUEST FOR AIR MONITORING INFORMATION FOR 100-BC REMEDIAL ACTION EXCAVATION	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0030/D197139147/D197139147_147_15481_59.pdf	The following information is provided in response the State of Washington, Department of Health (DOH), request for information regarding environmental air monitoring at the 100-B/C Area during the first two weeks of July 1996.	D,H,P		Y,S,X		NO	NO
DOE/RL-95-34	REV 0	100-BC	100-BC-1	1995 AUG	DOE-RL	118-B-1 BURIAL GROUND EXCAVATION TREATABILITY TEST REPORT	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D196005092/D196005092_992_58607866_76452_326.pdf	The general scope of the treatability test was to excavate five trenches within the 118-B-1 Burial Ground area with the goal of gathering data regarding the effectiveness of excavating waste materials followed by analytical screening and handling of the waste. Specifically the handling goal of the test was to demonstrate the feasibility of separating waste forms into the following four categories; Containers, Soil, Hard Waste, and Soft Waste.	D,H,P	G,Z,C	Y,S,X	A	NO	NO
N/A		100-BC	100-BC-1	1995 JUN	MA WILSON, RF SMITH ECOLOGY, EPA	ACTION MEMORANDUM ERA PROPOSAL 100-BC-1 DEMONSTRATION PROJECT	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0033/D196008976/D196008976_976_2731_10.pdf	The purpose of this non-time-critical removal action is to mitigate any threat to public health and the environment from the 116-B-4, 116-B-5 and 116-C-1 waste sites located in the 100-BC-1 Operable Unit and to collect information. This information will be used in the remedial design effort for the remainder of the 100 Area.	D,H,P	G,E	Y		NO	YES
N/A		100 AREA	100-BC-1 100-DR-1 100-HR-1	1995 JUN	KJ OATES, SM ALEXANDER EPA, ECOLOGY	FINAL DRAFT OF 100-BC-1 100-DR-1 AND 100-HR-1 PROPOSED PLANS	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0033/D196015049/D196015049_049_2949_19.pdf	This Proposed Plan identifies the preferred alternative for interim remedial measures for remedial action of radioactive liquid waste disposal sites that include contaminated soils and structures at the 100-BC-1 OU. It also summarizes other remedial alternatives evaluated for interim remedial measures in this OU. The intent of interim remedial measures is to speed up actions to address contaminated areas that pose potential threats to human health and the environment.	D		Y		YES	YES
BHI-TP-00005	REV 2	100-BC	100-BC-1	1994 DEC	BHI	118-B-1 EXCAVATION TREATABILITY TEST PROCEDURES	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D196038128/D196038128_128_58627952_76794_88.pdf	The 118-B-1 Excavation Treatability Test is required by milestone change request #M-15-93-04. This treatability study has two purposes to support development of the approach to be used for burial ground remediation and to provide specific engineering information for the design of burial grounds receiving waste generated from the 100 Area removal actions. Data generated from this test will also provide performance and cost information necessary for detailed analysis of alternatives for burial ground remediation.	D		Y		YES	NO
SD-EN-TI-213	REV 0	100-BC	100-BC-1	1994 JUL	KA BERGSTROM WHC	GEOPHYSICAL INVESTIGATION OF FRENCH DRAIN 116-B-9 AND DRY WELL 116-B-10 100-BC AREA	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0034/D196074912/D196074912_912_7110_10.pdf	The 116-B-10 Dry Well is a 3 ft-diameter, tile-lined well on a concrete slab, 7 ft below the surface, overlain by a manhole cover (DOE-RL 1991). The exact location of the well is uncertain. The objective of the survey was to locate the Dry Well and the French Drain. The area to be investigated had several buildings in the area which subsequently have been torn down. Ground penetrating radar (GPR) was the geophysical method chosen for the investigation.	D			A	NO	NO
SD-EN-TI-278	REV 0	100 AREA	100 AREA	1994 JUL	PJ VALCICH WHC	COLUMBIA RIVER EFFLUENT PIPELINE SURVEY	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0034/D196074913/D196074913_913_7111_25.pdf	This report presents the results of a comprehensive marine geophysical survey conducted in the Columbia River near the Hanford Reservation. The purpose of this investigation was to map the location and depth of burial of 14 effluent pipelines that extend into the Columbia River. There is concern that some of the pipes may be uncovered which may create a hazard to navigation in this part of the river. The survey was conducted from April 11th to April 17th, 1994.	D	G,Z			NO	NO
SD-EN-RA-003	REV 0	100-BC	100-BC-1	1994 JUN	KO KYTOLA WHC	QUALITATIVE RISK ASSESSMENT FOR 100-BC-1 SOURCE OU	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0034/D196076379/D196076379_379_7217_534.pdf	The purpose of the QRA at the 100-BC-1 operable unit is to focus on a limited set of human and environmental exposure scenarios in order to provide sufficient information to assist the Tri-Party signatories in making defensible decisions on the necessity of IRMs. Frequent- and occasional-use exposure scenarios are evaluated in the human health QRA to provide bounding estimates of risk, and are based on the residential and recreational exposure factors, respectively, presented in the Hanford Site Baseline Risk Assessment Methodology.	D,H,P	G,Z,E	Y,S,X	A	YES	NO
WHC-EP-0513		HANFORD SITE	HANFORD SITE	1994 JUN	SG WEISS WHC	THREATENED AND ENDANGERED WILDLIFE SPECIES OF HANFORD SITE RELATED TO CERCLA CHARACTERIZATION ACTIVITIES	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0034/D196075970/D196075970_970_7165_62.pdf	This report documents the biological assessment and describes the pertinent components of the Hanford Site as well as the planned characterization activities. Also provided are accounts of endangered, threatened, and federal candidate wildlife species on the Hanford Site and information as to how human disturbances can affect these species. Potential effects of the characterization activities are described with recommendations for mitigation measures.	D	G,C,E,T			YES	NO
SD-EN-DR-001	REV 0	100-BC	100-BC-1	1994 MAY	N/A	100-BC AREA REMEDIAL ACTIVITIES PREDESIGN REPORT	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0046/D195066487/D195066487_487_58604888_76388_705.pdf	This pre-design report will serve as the basis for generating the final design/construction documents (i.e., bid documents) for 100-B/C remediation. This pre-design phase is structured to satisfy the remedial design requirements of CERCLA (preliminary design phase) as specified in the guidance (EPA 1986).	D,H,P	G,Z,E,T			YES	NO
PNL-9437		100-BC	100-BC-1	1994 APR	PNL	MONITORING GROUNDWATER AND RIVER INTERACTION ALONG HANFORD REACH OF COLUMBIA RIVER	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D196088721/D196088721_721_58641796_77117_72.pdf	Water levels, temperatures, and electrical conductivity measured by the automatic monitor network provided an initial database with which to calibrate models and from which to infer ground and river water interactions for site characterization and remediation activities. Measurements of the dynamic river/aquifer system have been simultaneous at 1-hr intervals, with a quality suitable for hydrologic modeling and for computer model calibration and testing. This report describes the equipment, procedures, and results from measurements done in 1993.	D,P	Z			NO	NO

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SD-EN-SAD-027	REV 0	100-BC 100-F 100-K	100-BC-1 100-FR-1 100-KR-1	1994 APR	JA LOCKLAIR WHC	SAFETY ASSESSMENT FOR DECONTAMINATION AND DISMANTLEMENT OF 107-C 107-KE 107-KW AND 107-F RETENTION BASINS	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0035/D196088998/D196088998_998_8273_64.pdf	This document provides safety assessments of potential hazards associated with the decontamination and dismantlement of 107-C, 107-KE, 107-KW, and 107-F retention basins. The basins are constructed of reinforced concrete and steel and store approximately 3 million L (10 million gal) of cooling water discharged from the Hanford Site reactors during operation. Large volumes of water, contaminated with radioactive nuclides and chemicals, were stored in the basins before discharge to the Columbia River or cribs. Discharge of this water stopped when the reactors shut down. The metal structures have since deteriorated and the migration of contaminants has been detected.	D,P	G,Z,C	Y,S,X	A	YES	NO
SD-EN-TI-198		100-BC	100-BC-1	1993 SEPT	WHC	100 AREA COLUMBIA RIVER SEDIMENT SAMPLING	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0047/D196111730/D196111730_58650695_77597_172.pdf	The purpose of this investigation was to determine if radiological and chemical contaminants are present in Columbia River sediments. This study is among the activities identified in the Columbia River Impact Evaluation Plan (DOE-RL 1993a) and is intended as a first step in the establishment of an appropriate and comprehensive river sediment sampling program. The grain-size of sediments of interest to this study were less than 4 mm in diameter, e.g., sand-sized and smaller. The study was not intended to determine the extent of contamination.	D,H,P	G,Z	Y,S,X	A	NO	NO
WHC-EP-0620		100 AREA	100 AREA	1993 SEPT	DS LANDEEN WHC	100 AREAS CERCLA ECOLOGICAL INVESTIGATIONS	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0035/D196083727/D196083727_727_7818_214.pdf	This document reports the results of the field activities tasks, including (1) vegetation, insect, bird, and mammal surveys; and (2) vegetation, coyotes, raptor pellet, and small mammal and harvester ant burrow soil sampling. Sample analysis generally included metals, strontium-90, and gamma spectroscopy.	D,P	E		A	NO	NO
DOE/RL-93-45	REV 0 DRAFT A	100 AREA	100 AREA	1993 AUG	DOE-RL	100 AREA ISV PILOT SCALE TREATABILITY STUDY FOR RETRIEVED BURIAL GROUND WASTE	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0047/D196089544/D196089544_544_58641618_77127_258.pdf	This treatability study will utilize the pilot-scale ISV equipment to demonstrate the ISV process as a physical stabilization technique for compressible waste. An engineered site containing nonregulated, nonhazardous, and nonradioactive material representative of waste to be retrieved from the 100 Area will be used for this demonstration.	D,P			A,M	NO	NO
DOE/RL-93-04	REV 1	100 AREA	100 AREA	1993 AUG	DOE-RL	100 AREA EXCAVATION TREATABILITY TEST PLAN	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0047/D196089687/D196089687_687_58641619_77130_74.pdf	This test plan documents the requirements for a treatability study on field radionuclide analysis and dust control techniques. These systems will be used during remedial actions involving excavation. The purpose of this treatability test is to generate data supporting the detailed analysis and design of excavation operations. Data are obtained by correlating field and laboratory analysis for radionuclides and by demonstrating the effectiveness of dust control measures.	D,H,P	G,Z	Y,X	A	NO	NO
SD-EN-DGS-001	REV 0	100-BC	100-BC-1 100-BC-2 100-BC-5	1993 MAY	RT MOORE WHC	100-B AND 100-C AREA ENVIRONMENTAL RESTORATION PREDESIGN GUIDANCE DOCUMENT	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0037/D196136619/D196136619_619_13218_50.pdf	The scope of this guidance document includes all waste handling and analytical systems and activities associated with waste removal at the 100-B/C Area, including waste transportation to Suzie Switch within the Hanford Railroad System in the 200 Area.	D,P	G	Y,S		NO	NO
SD-EN-AP-120	REV 0	100-BC	100-BC-1 100-BC-2	1993 APR	EW PAPIN WHC	DESCRIPTION OF WORK FOR 100-BC ENGINEERING CHARACTERIZATION TEST PITS	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0037/D196135775/D196135775_775_13116_14.pdf	The objectives of these test pits are to: 1) locate the top of the radiological contamination at the burial sites, 2) assess levels of radiation and hazardous contamination (or lack of contamination) in all test pits, 3) observe the physical characteristics of the burial ground waste, and 4) assess maximum depth of contamination, if the depth is less than 38 ft.	D		Y		NO	NO
DOE/EIS-0119F		100 AREA	100 AREA	1992 DEC	DOE	DECOMMISSIONING OF EIGHT SURPLUS PRODUCTION REACTORS AT HANFORD SITE ADDENDUM	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0047/D196136488/D196136488_488_58659173_77976_482.pdf	This Addendum, which together constitute the final environmental impact statement (FEIS) prepared by DOE on the decommissioning of eight surplus plutonium production reactors located at the Hanford Site. The FEIS consists of two volumes. The second volume (this Addendum) consists of a summary; Chapter 9, which contains comments the DEIS and provides DOE's responses to the comments; Appendix F, which provides additional health effects information; Appendix K, which contains costs of decommissioning in 1990 dollars; Appendix L, which contains additional graphite leaching data; Appendix M, which contains a discussion of accident scenarios; Appendix N, which contains errata; and Appendix O, which contains reproductions of the letters, transcripts, and exhibits that constitute the record for the public comment period.	D,H	G,Z,C,E,T	Y,X		NO	YES
DOE/RL-92-12	REV 1	100 AREA	100 AREA	1992 MAY	DOE-RL	SAMPLING AND ANALYSIS OF 100 AREA SPRINGS	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0047/D196102723/D196102723_723_58646143_77355_128.pdf	This study was initiated to ascertain the concentrations of chemical and radiological constituents discharged through springs into the Columbia River. Definition of the chemical and radiological concentrations retained on sediments adjacent to springs was attempted. Sediment samples were collected adjacent to the springs to indicate retention of contaminants by the sediments. Near-shore river water samples were also collected adjacent to the springs.	D,H,P	G,Z,C	Y,S,X	A	NO	NO
SD-EN-TI-025	REV 0	100-BC	100-BC-1 100-BC-2 100-BC-3 100-BC-4 100-BC-5	1992 MAR	WHC	DISPOSAL OF HEXAVALENT CHROMIUM IN 100-BC AREA IMPLICATIONS FOR ENVIRONMENTAL REMEDIATION	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0039/D196091942/D196091942_942_8588_16.pdf	The objective of this report is to evaluate past disposal practices associated with this contaminant, including waste liquid volumes and chemical inventories for individual disposal facilities, and unplanned releases associated with reactor cooling water systems. An assessment also can be made of potential impact to the groundwater in the area. This information is important in the selection of treatment systems and approaches that will be utilized in 100-BC remediation activities.	D,P	G,Z	Y,S,X	A	NO	NO
SD-EN-TI-011		100 AREA	100 AREA	1992 MAR	KA LINDSEY WHC	GEOLOGY OF NORTHERN PART OF HANFORD SITE OUTLINE OF DATA SOURCES AND GEOLOGIC SETTING OF 100 AREAS	http://www5.hanford.gov/arpr/?content_idpage&AKey=D196090817	This report outlines the types of geologic data for the Hanford Site north of the Gable Mountain anticline and where this data can be obtained. Based on the available data, preliminary geologic interpretations will be presented. These interpretations will be divided into four site specific sections: (1) 100-BC and 100-K, (2) 100-N and 100-D, (2) 100-H, and (4) 100-F. This report includes a brief discussion of regional geology in order to put the study area in its geologic context.	D	G,T			NO	NO
SD-EN-TI-006	REV 0	100 AREA	100 AREA	1992 MAR	RE PETERSON WHC	HYDROLOGIC AND GEOLOGIC DATA AVAILABLE FOR REGION NORTH OF GABLE MOUNTAIN	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0039/D196090833/D196090833_833_8504_136.pdf	This data compilation report contains an inventory of readily available information on existing groundwater wells, hydrology, and geology that can be used by RI/FS investigators. It is intended as a reference document that describes the available data, when data were collected, and how the data can be accessed. It has been designed as a supplement to other reports that evaluate existing information relative to past-practices objectives.	D	G,Z	Y		NO	NO
SD-EN-SAD-002	REV 0	100 AREA	100 AREA	1991 SEPT	WE TAYLOR WHC	100 AREA LOW HAZARD CHARACTERIZATION ACTIVITIES SAFETY ASSESSMENT	http://www5.hanford.gov/pdw/fsd/AR/FS_D0001/FSD0039/D196078231/D196078231_231_7271_34.pdf	This safety assessment documents the analysis of hazards, leading to the conclusion that the activity does not present an unacceptable hazard to the three receptor groups of concern: the facility worker, the onsite person located 330 ft (100 m) from the activity, or the offsite individual.	D,H,P	G,Z,C,T	Y		YES	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
N/A		100-BC	100-BC-1	1989 JUN	PNL	SITE CHARACTERIZATION PLAN FOR 116-B-6A CRIB ISV DEMONSTRATION	http://www5.hanford.gov/arpir/?content=detail&AKey=D195062455	The purpose of this site characterization plan is to provide guidance to PNL and its site characterization contractors for drilling and sampling the 116-B-6A crib (formerly 116-8-6-1 or 111-B crib) prior to a demonstration test of the in situ vitrification (ISV) process at the site. This plan contains a short description of the ISV technology, a summary of the information known about the crib, the geology and hydrology of the surrounding area, and a description of the work to be performed in characterizing the crib prior to performing the ISV demonstration test.	D	G,Z			NO	NO
DOE/EIS-0119D	DRAFT	HANFORD SITE	HANFORD SITE	1989 MAR	DOE	DECOMMISSIONING OF EIGHT SURPLUS PRODUCTION REACTORS AT HANFORD SITE	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0046/D19506296/D19506296_58599282_76312_472.pdf	This is a summary of the draft environmental impact statement (DEIS) prepared by the DOE on the decommissioning of eight surplus plutonium production reactors located at the Hanford Site. The objectives of the summary are to state the major results of the environmental analyses and to serve as a guide to the body of the DEIS.	D,H,P	G,Z,C,E,T	Y,S,X,P	A,M	YES	YES
WHC-SD-DD-TI-033	REV 0	100-B 100-D 100-F	100-B 100-D 100-F	1988 OCT	PW GRIFFIN WHC	184-B POWERHOUSE 184-D POWERHOUSE 1717-F MAINTENANCE SHOP FACILITY DECOMMISSIONING REPORT	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0047/D196008011/D196008011_58610836_76505_48.pdf	This report documents the final site cleanup of the previously decommissioned 184-B Powerhouse, 184-D Powerhouse, and 1717-F Maintenance Shop. The report includes the three site cleanup projects because of their like-work effort and the contiguous FY 88 work schedule. The site cleanup projects were worked consecutively from the 184-B site, to the 184-D site and finally the 1717-F site.	D,H	G,Z	Y		NO	NO
PNL-4722		100 AREA	100 AREA	1983 JUL	PNL	ALLOWABLE RESIDUAL CONTAMINATION LEVELS FOR DECOMMISSIONING FACILITIES IN 100 AREAS OF HANFORD SITE	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0047/D196008012/D196008012_58610528_76506_148.pdf	This report contains a description and the results of a method for determining Allowable Residual Contamination Levels (ARCL) for radionuclides remaining at each of five generic categories of facilities in the 100 Areas at the Hanford Site.	D,P	G,E	Y,S,X	M	YES	NO
10-AMRC-0054	REV 0	100-BC	100-BC-2	2010 FEB	MS FRENCH DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND SUPPORTING DOCUMENTATION FOR THE 100-B-31 GARNET SAND LOCATED AT THE 183C CLEARWELL PADS REVISION 0	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0054/0084790/10-AMRC-0054 - Letter_11021003491 - 1.pdf	This report demonstrates that the 100-B-31 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone or residual contaminant concentrations that would require any institutional controls.	D,P	Z	Y	A	NO	NO
2008-002		100-BC	100-BC-2	2008 JAN	S CHARBONEAU, L BUELOW DOE-RL, EPA	WASTE SITE RECLASSIFICATION FORM 100-BC-2 116-C-3	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0042/DA06772111/1.PDF	This report demonstrates that the 116-C-3 waste site meets the objectives for Interim Closed Out. The results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use and are protective of groundwater and the Columbia River. This site does not have a deep zone or residual contaminant concentrations that would require any institutional controls.	D,P	G,Z	Y,S,X	A	NO	NO
2004-013		100-BC	100-BC-2	2007 JUL	DA FAULK, KD BAZZELL EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 100-C-9:2	http://www5.hanford.gov/pdw/fsd/ar/fsd0003/da05453688/da05453688_39369_121.pdf	This report demonstrates that the 100-C-9:2 waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses (as bounded by the rural-residential scenario) and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are sufficiently protective of groundwater and the Columbia River to preclude further remedial action. No institutional controls are required for the site.	D,P	G,Z	Y,S,X	A	YES	NO
2004-012		100-BC	100-BC-2	2007 JUL	DA FAULK, KD BAZZELL EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 100-C-9:1	http://www5.hanford.gov/pdw/fsd/ar/fsd0003/da05239013/DA05239013_39050_139.pdf	This report demonstrates that the 100-C-9:1 waste subsite meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations in the shallow-zone soils do not preclude any future uses (as bounded by the rural-residential scenario). The results also demonstrate that residual contaminant concentrations in both the shallow and deep zones are protective of groundwater and the Columbia River. Because the suitability of direct exposure to deep zone soils has not been demonstrated, institutional controls to prevent uncontrolled drilling/excavation are required for the section of the 100-C-9:1 pipeline that was not excavated in the deep zone.	D,P	G,Z	Y,S,X	A	YES	NO
CVP-2006-00002	REV 0	100-BC	100-BC-2	2006 JUN	WCH	CLEANUP VERIFICATION PACKAGE FOR 118-B-6 108-B SOLID WASTE BURIAL GROUND	http://www5.hanford.gov/pdw/fsd/ar/fsd0008/da03009218/da03009218_36176_115.pdf	The purpose of this cleanup verification package is to document that the 118-B-6 Solid Waste Burial Ground site was remediated. These goals and objectives are documented in the 100 Area Burial Grounds ROD (EPA 2000) and the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAW P) (DOE-RL 2005).	D,P	G,Z	Y	M	YES	NO
2006-003		100-BC	100-BC-2	2006 APR	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 100-B-1	http://www5.hanford.gov/arpir/?content=findpage&AKey=DA02465233	This report demonstrates that the 100-B-1 Surface Chemical and Solid Waste Dumping Area waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses (as bounded by the rural-residential scenario) and allow for unrestricted use of shallow zone soils. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	G,Z	Y	A	YES	NO
570537		100-BC	100-BC-1 100-BC-2	2006 JAN	DA FAULK, DC SMITH EPA, DOE-RL	TREATMENT PLAN FOR TREATMENT OF 116-C-3 CHEMICAL WASTE TANKS JANUARY 24, 2006	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0009/DA01974601/DA01974601_34725_10.pdf	Short document outlining the remediation process for 116-C-3.'	D	Z	Y	A	NO	NO
2005-019		100-BC	100-BC-2	2005 AUG	DA FAULK, DC SMITH EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 128-C-1	http://www5.hanford.gov/pdw/fsd/AR/FSD0001/FSD0011/DA780137/DA780137_40583_71.pdf	This report demonstrates that the 128-C-1 Burn Pit waste site meets the objectives for interim closure. The results of verification sampling show that residual contaminant concentrations do not preclude any future uses (as bounded by the rural residential scenario) and allow for unrestricted use of shallow zone soils (i.e., surface to 4.6 in ft) deep. The results also demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	G,Z	Y	A	YES	NO

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05-AMRC-0143		100-BC	100-BC-2	2005 FEB	L ERICKSON DOE-RL	TRANSMITTAL OF APPROVED WASTE SITE RECLASSIFICATION FORM AND ASSOCIATED REMAINING SITES VERIFICATION PACKAGE FOR 600-232 SITE	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD0013/D7300418/D7300418_45186_41.pdf	This report demonstrates that the 600-232 site meets the objectives for interim closure. This report also shows that site soil contaminant concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario, and that Contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, no deep zone institutional controls are required.	D,P	G,Z	Y	A	YES	NO
2004-014		100-BC	100-BC-2	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 100-C-9:3	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD0015/D5383010/D5383010_23514_28.pdf	The 100-C-9:3 183-C Clearwells Process Sewer Pipelines (100-C-9:3) (referred to as the 100-C-9:3 site) sample results demonstrate that the site achieves the objectives remedial action and remedial action goals. These results show that scale and associated residual soil concentrations support future land uses that can be represented by a rural-residential scenario. The results demonstrate that residual concentrations in the deep zone are protective of groundwater and the Columbia River. Institutional controls will be required because the evaluation of compliance with direct exposure standards failed for some of the semivolatiles.	D,P	G,Z	Y	A	YES	NO
2004-015		100-BC	100-BC-2	2004 JUN	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 100-C-9:4	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD0015/D5383039/D5383039_23515_24.pdf	The 100-C-9:4 Cooling Water Pipe Tunnels Site (referred to as the 100-C-9:4 site) sample results and supporting documentation demonstrate that the site meets the set objectives. These results show that the site and contaminant levels remaining in the soil will be protective of groundwater and the Columbia River. It should be noted, however, that with the maximum residual concentration of hexavalent chromium in the pipes, institutional controls are required to prevent an inhalation exposure pathway.	D,P	G,Z	Y	A	YES	NO
CVP-2004-00002	REV 0	100-BC	100-BC-2	2004 APR	BHI	CLEANUP VERIFICATION PACKAGE FOR THE 118-B-4 SPACER BURIAL GROUND	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD00061/1010201076/1010201_0761.pdf	The purpose of this cleanup verification package (CVP) is to document that the 118-B-4 Spacer Burial Ground, located approximately 90 m (300 ft) northeast of the 105-B Reactor Building within the 105-B exclusion area fence (and included in the 100-BC-2 Operable Unit), was remediated in accordance with remedial action goals. The 100 Area Burial Grounds ROD provides DOE-RL the authority, guidelines, and objectives to conduct this remedial action. The preferred remedy specified in the 100 Area Burial Grounds ROD and conducted for the 118-B-4 Burial Ground site was excavation, treatment as necessary, and disposal of contaminated materials at the Environmental Restoration Disposal Facility (ERDF).	D,P	G,Z	Y	M	YES	NO
2003-34		100-BC	100-BC-2	2003 DEC	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 116-C-6	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD00015/D4854891/D4854891_23225_20.pdf	The Waste Site Evaluation for the 116-C-6 105-C Fuel Storage Basin Cleanout Percolation Pit (BHI 2003a) demonstrates that the site meets the objectives for interim closure. Residual soil concentrations at the site support future land uses that can be represented (or bounded) by a rural-residential scenario and pose no threat to groundwater or the Columbia River.	D,P	G,Z	Y	A	YES	NO
2003-24		100-BC	100-BC-2	2003 SEPT	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 132-C-3	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2985731	The Waste Site Evaluation for 132-C-3, 117-C Filter Building (Calculation No. OIOOB-CA-VO131), demonstrates that the site meets the objectives for no action interim closure. Any residual concentrations will support future land uses that can be represented (or bounded) by a rural-residential scenario, and that based on RESidual RADioactivity (RESRAD) modeling, residual concentrations at the site pose no threat to groundwater or the Columbia River.	D,P	G,Z	Y	A	NO	NO
2003-26		100-BC	100-BC-2	2003 SEPT	DA FAULK, H BILSON EPA, DOE-RL	WASTE SITE RECLASSIFICATION FORM 100-BC-2 132-C-1	http://www5.hanford.gov/arpir/?content=indpage&AKey=D4854452	The Waste Site Evaluation for 132-C-1, 116-C Reactor Exhaust Stack Site (BHI 2003), demonstrates that the site meets the objectives for no action interim closure. Residual soil concentrations will support future land uses that can be represented (or bounded) by a rural-residential scenario and pose no threat to groundwater or the Columbia River based on RESidual RADioactivity (RESRAD) modeling.	D,P	G,Z	Y	A	NO	NO
CVP-2003-00007	REV 0	100-BC	100-BC-2	2003 JUL	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-B10 SEPTIC TANK SYSTEM	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD00048/D2696246/D2696246_58693120_78692_165.pdf	The purpose of this cleanup verification package (CVP) is to document that the 1607-B10 Septic Tank System site (herein referred to as the 1607-B10 site) was remediated. The ROD provides the U.S. Department of Energy, Richland Operations Office the authority, guidance, and objectives to conduct this remedial action. The preferred remedy specified in the ROD (EPA 1999) and conducted for the 1607-B10 site was excavation, treatment as necessary, and disposal of contaminated materials at the Environmental Restoration Disposal Facility (ERDF).	D,P	G,Z	Y	M	YES	NO
CVP-2003-00008	REV 0	100-BC	100-BC-2	2003 JUL	BHI	CLEANUP VERIFICATION PACKAGE FOR 1607-B11 SEPTIC TANK SYSTEM	http://www5.hanford.gov/arpir/?content=indpage&AKey=D2696534	The purpose of this cleanup verification package (CVP) is to document that the 1607-B11 Septic Tank System site was remediated. The ROD provides the U.S. Department of Energy, Richland Operations Office the authority, guidance, and objectives to conduct this remedial action. The preferred remedy specified in ROD (EPA 1999) and conducted for the 1607-B11 site was excavation, treatment as necessary, and disposal of contaminated materials at the Environmental Restoration Disposal Facility (ERDF).	D,P	G,Z	Y	M	YES	NO
BHI-01106	DRAFT A	100-BC	100-BC-2	1997 DEC	TJ RODOVSKY BHI	190-C MAIN PUMPHOUSE FACILITY FINAL REPORT	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD0027/D198067100/D198067100_17544_50.pdf	This report documents the decontamination and decommissioning (D&D) of the 190-C Main Pumphouse Facility. The D&D of the facility included characterization, engineering, decontamination, removal of hazardous and radiologically contaminated materials, equipment removal, demolition of the structure, and restoring the site.	D,P		Y	A	YES	NO
8901		100 AREA	100-BC-1 100-BC-2 100-BC-5 100-DR-1 100-DR-2	1995 JAN	L ERICKSON DOE-RL	EPA EXPEDITED REVIEW COMMENTS ON PRELIMINARY DETERMINATION OF CHROMIUM CONCENTRATION WITHIN PORE WATER PERIPHYTE AND CHINOOK SALMON EGGS AT HANFORD REACH SPAWNING AREA IN PROXIMITY TO 100-HR-3 OU BHI-00156 REV 0-A NOVEMBER 1994	http://www5.hanford.gov/pdw/fsd/AR/F5D0001/FSD0033/D196033966/D196033966_966_4389_11.pdf	RESPONSE TO EPA EXPEDITED-REVIEW COMMENTS ON PRELIMINARY DETERMINATION OF CHROMIUM CONCENTRATION WITHIN PORE WATER, PERIPHYTE, AND CHINOOK SALMON EGGS AT HANFORD REACH SPAWNING AREA IN PROXIMITY TO 100-HR-3 OPERABLE UNIT.	D	Z,E	Y		NO	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
SD-EN-TI-220	REV 0	100-BC	100-BC	1994 MAY	WHC	100-B AREA TECHNICAL BASELINE REPORT	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D196079366/D19607966_58638034_77035_306.pdf	This document is prepared in support of the Environmental Restoration program at the U.S. Department of Energy's (DOE) Hanford Site. It provides a technical baseline and characterization of waste sites located at the 100-B Area and results from an environmental investigation undertaken by the Westinghouse Hanford Company (WHC) History Office in support of the Environmental Restoration Engineering Function. It is based on the review and evaluation of numerous Hanford Site current and historical reports, drawings, and photographs, supplemented by site inspections and employee interviews. No intrusive field investigation or sampling was conducted.	D,H,P	G,Z,E	Y,S,X	A	NO	NO
SD-EN-TI-216	REV 0	100 AREA 200 AREA	100 AREA 200 AREA	1994 JAN	JA STEGEN WHC	VEGETATION COMMUNITIES ASSOCIATED WITH 100 AREA AND 200 AREA FACILITIES ON HANFORD SITE	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0035/D196101081/D196101081_9393_66.pdf	This study was conducted to determine the plant communities and estimate vegetation cover in and directly adjacent to the 100 and 200 Areas, primarily in relation to waste sites.	D	E		A	NO	NO
SD-EN-TI-138	REV 0	100-BC	100-BC-2	1993 NOV	TH MITCHELL WHC	GEOPHYSICAL INVESTIGATION OF 118-C-1 BURIAL GROUND 100-BC AREA	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0062/E0032227/0032227_-110111607591.pdf	This report summarizes the results of the geophysical investigations conducted as part of the characterization of the burial ground. The geophysical surveys were designed as reconnaissance investigations. The methods chosen were selected because they are non-intrusive, relatively fast, economical, and have been used successfully in other geophysical investigations on the Hanford Site. Ground-Penetrating Radar (GPR) and Electromagnetic Induction (EMI) were the two techniques used in this investigation.	D	G	Y	A	NO	NO
SD-EN-TI-137	REV 0	100-BC	100-BC-2	1993 OCT	K BERGSTROM WHC	GEOPHYSICAL INVESTIGATION OF 118-B-1 BURIAL GROUNDS 100-BC AREA	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0062/E0032115/0032115_-110111607571.pdf	This report summarizes the results of the geophysical investigations that were conducted as part of the characterization of the burial ground. The geophysical surveys were designed and conducted as reconnaissance investigations. The methods chosen were selected because they are nonintrusive, relatively fast, economical, and have been used successfully in numerous other geophysical investigations throughout the Hanford Site with similar survey objectives. Ground-Penetrating Radar (GPR) and Electromagnetic Induction (EMI) were the two techniques used in the investigation. Magnetic gradiometers were also tested over a portion of the burial ground.	D	G	Y	A	NO	NO
UNI-3855		100 AREA	100-BC-2 100-FR-1 100-HR-1	1986 JUL	EW POWERS, JM STEFFES UNC	116-C 116-F AND 116-H REACTOR EXHAUST VENTILATION STACK DEMOLITION HANFORD SITE INDIVIDUAL FACILITY REPORT	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0041/D196008309/D196008309_2605_44.pdf	This report documents the decommissioning of three reactor exhaust stacks on the Hanford Site. Each of the eight retired reactors had an exhaust stack designated as the 116 building or stack. This report covers the demolition of the 116-C, -F, and -H stacks.	D,H,P		Y		NO	NO
UNI-946		100 AREA	100 AREA	1978 MAY	UNC	RADIOLOGICAL CHARACTERIZATION OF RETIRED 100 AREAS	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0047/D196008079/D196008079_58610531_76511_498.pdf	The purpose of this study is to establish radionuclide inventories and concentrations in the retired 100 Area radioactive solid and liquid waste disposal facilities, leakage areas, reactors, and associated facilities. The data presented are intended to aid in establishing long-term disposition and control of these facilities.	D,P	G,Z	Y,S,X	A	NO	NO
DOE/RL-2005-37	REV 0	100 AREA	100 AREA	2005 MAY	DOE-RL	STATUS OF HANFORD SITE RISK ASSESSMENT INTEGRATION FY 2005	http://www5.hanford.gov/arpir/?content=findpage&AKey=DA097087	The purpose of this document is to summarize the scope and requirements of risk assessments, describe the schedule and status of the major individual risk assessment projects currently under way, identify the interfaces between the programs and projects that are developing risk assessments, and propose a process that will address issues identified in this report. In meeting these objectives, this document presents information on current risk assessments being conducted across the Hanford Site, shows the geographical boundaries of the risk assessments, presents a combined schedule that details the relationships between the various risk assessments, highlights risk assessment gaps for future action, and provides a process for integrating risk assessments.	D				YES	NO
PNNL-14444		100 AREA	100 AREA	2003 OCT	MJ HARTMAN, RE PETERSON PNNL	AQUIFER SAMPLING TUBE RESULTS FOR FY 2003	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0016/D3253922/D3253922_22152_71.pdf	This report presents and discusses results of the fiscal year 2003 sampling event associated with aquifer tubes along the Columbia River in the northern Hanford Site. Aquifer tube data help define the extent of groundwater contamination near the Columbia River, determine vertical variations in contamination, monitor the performance of interim remedial actions near the river, and support impact studies.	D,P	Z	Y	A	NO	NO
BHI-01494	REV 0	100 AREA	100 AREA	2001 JUN	RF RAIDL BHI	AQUIFER SAMPLING TUBE DATA SUMMARY FALL 2000	http://www5.hanford.gov/arpir/?content=findpage&AKey=D8796866	This report summarizes the aquifer sampling tube results for samples collected along the Columbia River shoreline in the fall of 2000. The focus of this effort was to identify the tubes which best represented groundwater quality as compared to those affected by the groundwater/river water mixing zone. This data report describes the sampling methods, the results of sampling activities, a comparison of the results to fall 2000 groundwater plume maps, and recommendations for data evaluation and future use of the aquifer sampling tubes.	D,P	Z	Y	A	NO	NO
BHI-01153	REV 0	100 AREA	100 AREA	1998 FEB	DB ERB, JV BORGHESE, RE PETERSON BHI	AQUIFER SAMPLING TUBE COMPLETION REPORT 100 AREA AND HANFORD TOWNSITE SHORELINES	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0027/D198103289/D198103289_289_17810_92.pdf	This report summarizes the installation and sampling activities of the work performed the fall of 1997. The summary includes the depths and locations where sampling tubes are installed and the results of sampling activities. Recommendations for data evaluation and future use of the tubes are also included.	D,P	Z	Y	A	NO	NO
N/A		100-B 100-K 100-HR-3 100-HR-4	100-BC-5	1997 SEPT	AC TORTOSO DOE-RL	100 AREA RIVERBANK SEEPAGE SAMPLING RESULTS FY 1997	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0028/D197268361/D197268361_361_16535_19.pdf	This report transmits a summary of riverbank seepage sampling conducted in the 100-BC-5, 100-KR-4, and 100-HR-3 Operable Units from CH2M Hill Hanford, Inc. to Bechtel Hanford, Inc. The report identifies the work completed and presents tables that list the results returned by the analytical laboratories.	D	Z	Y,S,X		NO	NO
PNL-9785		HANFORD SITE	HANFORD SITE	1994 APR	PW ESLINGER PNL	Data Compendium for the CRCIA	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0035/D196084240/D196084240_240_7824_72.pdf	This document provides a data compendium of documents and databases describing contaminants released to the Columbia River due to activities at the Hanford site. This data compendium was developed in support of TPA Milestone M-13-80. It includes a discussion of data sources, descriptions of the physical format of the data, and discussions of the search processes used to identify data.	D,H,P	G,Z,E	Y	A	NO	NO
WHC-EP-0260		HANFORD SITE	HANFORD SITE	1989 DEC	JA SERKOWSKI, WA JORDAN WHC	OPERATIONAL GROUNDWATER MONITORING AT HANFORD SITE 1988	http://www5.hanford.gov/pdw/fsd/AR/FSD001/FS0041/D195066316/D195066316_316_1510.pdf	The purpose of this annual report is to describe the Operational Groundwater Monitoring Network (OGWMN) and summarize the results generated during calendar year (CY) 1988	D,P	G,Z		A	NO	NO

Document #	Rev./Draft/ Vol.	Area	Operable Unit	Date	Authors/ Originator	Title	Link	Summary	Background Site	Physical Setting	Contaminant Description	Analysis and Modeling	Risk Assessment	Alternatives Development
PNL-6992		100 AREA	100 AREA	1989 SEPT	PNL	TRENDS IN RADIONUCLIDE CONCENTRATIONS FOR SELECTED WILDLIFE AND FOOD PRODUCTS NEAR HANFORD SITE FROM 1971 THROUGH 1988	http://www5.hanford.gov/pdw/fsd/AR/FS0001/FSD0047/D196008013/D196008013_58610736_7607_68.pdf	The objectives of this summary investigation were to examine selected wildlife and food products sampling data for the past 18 years to identify long-term trends or significant year-to-year changes in radionuclide concentrations and, if possible, relate any observed change to a probable cause.	D	E		A	NO	NO
N/A		HANFORD SITE	HANFORD SITE	1980 JAN	N/A	OVERVIEW OF CULTURAL RESOURCES ON HANFORD RESERVATION IN SOUTH CENTRAL WASHINGTON STATE	http://www5.hanford.gov/pdw/AR/FS0001/FSD0041/D196018271/D196018271_471_3219_138.pdf	This report constitutes an overview of the cultural resources on the Hanford Reservation in south-central Washington State. The purpose of the study is to provide an up-to-date description of the cultural resources that will be useful for planning future construction projects and also to guide the management of known sites.	D,H,P	G,Z,C,E,T			NO	NO
UNI-2983		100 AREA	100 AREA	1984 SEPT	EM GREAGER, JA ADAMS, MC HUGHES UNC	Action description memorandum decommissioning of the shut down Hanford 100 Area Reactors	http://www5.hanford.gov/arpir/?content=indpage&AKey=E0009248	DOE-RL proposes to decommission the eight shut-down production reactors located in the 100 Areas. In compliance with the National Environmental Policy Act (NEPA) of 1969, and the DOE-Environmental Compliance Guide 1981, this Action Description Memorandum (ADM) has been prepared to provide environmental input into the decision making process. The decision to be made is whether or not to carry out the proposed decommissioning action and what level of NEPA documentation will be required to support this action	D,H,P	G,Z,C,E,T	Y,S,X		YES	NO
UNI-2898	REV 0	100 AREA	100 AREA	1987 MAR	PW GRIFFIN UNC	decommissioning conceptual study in situ decommissioning of either 105 reactor buildings in the 100 areas	http://www5.hanford.gov/pdw/AR/FS0001/FSD0057/E0009245/E0009245%20-%2010062307581.PDF	Eight deactivated reactors on the Hanford Site (-100-B, -C, -D, -DR, -E, -H, -KE, and -KW) will be decommissioned by this project. This decommissioning conceptual study report is based on performing the decommissioning with the recommended preferred method (in situ). Final selection of the method of decommissioning is dependent upon the completion of the National Environmental Policy Act (NEPA) process. For the purpose of estimating this effort, it is assumed that the work will be done as follows.	D,P	G	Y	A	NO	YES
PNNL-13149		HANFORD SITE	HANFORD SITE	2000 MAR	GV LAST, PNNL	Review of geophysical characterization methods used at the Hanford Site	http://www.osti.gov/bridge/product_bibli.jsp?query_id=2&page=0&osti_id=752575&Row=0	This paper presents a review of geophysical methods used at Hanford in two parts, 1) shallow surface-based geophysical methods and 2) borehole geophysical methods. This review was not intended to be "all encompassing," but should represent the vast majority of geophysical work conducted onsite and aimed at hazardous waste investigations in the vadose zone and/or uppermost groundwater aquifer(s). This review did not cover geophysical methods aimed at large-scale geological structures or seismicity and, in particular, did not include those efforts conducted in support of the Basalt Waste Isolation Program. This review focused primarily on the more recent efforts.	D	G	Y	A	NO	NO